Section C - Statement of Work

C.1 Background

The National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) is required to conduct an annual survey of marine recreational anglers, gathering information on (1) their participation, fishing effort, and catch in marine recreational fishing, and (2) their demographic and economic characteristics.

Until recent years, it was thought that commercial fisheries took the greater part of the total marine fishery catch in the waters of the United States. However most species of fish in estuarine and inshore areas, as well as many in open waters, are harvested jointly by recreational and commercial fishermen. Recent data indicate that catches by the marine recreational fishery are a significant portion of the total landings of many marine species. The need for commercial catch statistics has been satisfied in the past with routinely collected catch and effort data for most commercial fisheries. Comparable data for marine recreational fisheries have become available only since 1979. Management responsibilities imposed by 16 USC 1801, the Magnuson Fishery Conservation and Management Act (MFCMA), make it necessary to collect data on the marine recreational fishery catch.

Catch and effort statistics are fundamental for assessing the influence of fishing on any stock of fish. The quantities taken, the fishing effort, and the seasonal and geographical distribution of the catch and effort are required for the development of rational management policies and plans. Accurate, up-to-date catch statistics collected over the range of a given species can be combined with information collected by associated biological studies to provide conservation agencies with the information necessary to manage the fishery for optimum yield. Recreational effort and catch data are essential for NMFS, the Regional Fishery Management Councils, State conservation agencies, recreational fishing industries, and others involved in the management and productivity of marine fisheries. The allocation of many fishery resources depends on the results of these surveys.

The National Marine Fisheries Service is charged with administering a program of research and services relating to the ocean and inland waters of the United States. Collecting statistics on marine recreational fisheries is authorized by:

- 1. Section 5(a)(4) of the Fish and Wildlife Act of 1956 (16 USC 742), which provides for the collection and dissemination of statistics on commercial and sport fishing;
- 2. Migratory Game Fish Study Act of 1959 (16 USC 760(e)), which provides for a continuing study of migratory marine fishes, including the effects of fishing on the species.
- 3. Sections 303 and 304(e) of the Magnuson Fishery Conservation and Management Act of 1976 (MFCMA), (Public Law 94-265), and the re-authorized and amended Magnuson-Stevens Fishery Conservation and Management Act of 1996 (MFCMA), which require the collection of statistics for fishery conservation and management.
- 4. Sections 802 and 804 of the Atlantic Coastal Fisheries Cooperative Management Act, which requires NMFS to develop and implement a program to support the state and Commission interstate fishery management efforts, including collection, management and analysis of fisheries data.

C.2 History of NMFS Recreational Fishery Statistics

Comprehensive collections of the effort and catch data needed for accurate and precise estimations of recreational fishery catches of marine fishes are difficult and expensive. Recreational anglers are dispersed along the coast, fishing from boats, piers, jetties, docks and the open beach. They fish during the day and night throughout the year. The few coastal states collecting catch statistics have used a variety of methods, but have usually covered only a part of a state or selected segments of a fishery. NMFS conducted Salt Water Angling Surveys (SWAS) in 1960, 1965, and 1970. These surveys were supplements to the Bureau of Sport Fisheries and Wildlife's National Survey of Hunting and Fishing. Prior to 1979 the SWAS's were the only surveys that produced marine recreational catch and participation statistics by species for the entire United States.

The data collected in the SWAS were inadequate to satisfy requirements for information on recreational harvests of marine fishes. The SWAS did not sufficiently provide the area-specific catch information needed for effective management of fishery stocks. More importantly, substantial response errors resulted from the use of a one-year recall period. Respondents were unable to accurately remember information requested for all fishing trips taken during the previous twelve months. Data collected every five years were found to be unsuitable for tracking rapid changes in the recreational harvest. Fisheries managers needed more detailed and reliable catch, participation, and economic statistics on marine recreational fishing to provide comprehensive estimates of the domestic harvest of marine fish species in U.S. waters. They needed such information for evaluating future demands on the fish stocks, for predicting and evaluating the impact of fisheries regulations, and planning recreational facilities for anglers.

NMFS conducted regional surveys in the Northeastern coastal states in 1974 and the South Atlantic and Gulf of Mexico states in 1975. The data collections used a multi-stage sampling procedure. The regional surveys assumed that the target population of recreational fishing households could be considered as a subset of the households with telephones. NMFS used random-digit-dialing methods to select a sample of residential households with anglers who fished during the previous twelve months. The survey administrators mailed a questionnaire requesting detailed information on a full year of marine fishing activity to random samples of these households stratified by household population density and distance from shore of resident fishing trips. Analyses of the survey results identified numerous procedural weaknesses, such as a low rate of response to the initial screening phase, a twelve-month recall period, and a very low rate of response to the mailed questionnaire (approximately 25 percent).

NMFS later initiated a study of alternative methodologies during the late 1970's and pre-tested some of the alternatives on the Pacific coast. The study compared several data collection approaches and recommended one as the most cost-effective. The recommended approach was the current survey design, a complemented surveys approach involving the combination of a telephone household survey with an access-site Intercept survey. The current Marine Recreational Fishery Statistics Survey (MRFSS) uses random-digit-dialing of households in coastal counties to obtain participation and effort data, as well as information on the proportion of fishing households. The MRFSS uses an access-site Intercept survey to obtain the distribution of the catch per trip at the species level. The Intercept survey also collects information on the numbers of anglers with and without phones and the distribution of anglers by state and county of residence. This information is used in the expansion of the estimates of coastal resident effort to obtain estimates of total effort.

In addition, the Intercept survey collects other data of interest to fishery managers.

NMFS further tested the complemented survey methodology on the Atlantic and Gulf coasts to ensure that: 1) information used in developing the Pacific coast sample frame was available for other parts of the country, and, 2) the approach was appropriate in areas with different geographic and demographic characteristics. NMFS completed the Atlantic and Gulf coasts study in December 1978.

Routine marine recreational fishery surveys employing this complemented survey approach began in 1979 and have been conducted in the following areas and years:

Atlantic and Gulf coasts 1979-1998

Pacific coast 1979-1989, 1993-1998

Western Pacific area 1979-1981 Caribbean area 1979, 1981

Data collected in each state included the catch (number and weight) by species and by area of fishing, the number of marine recreational anglers, the number and duration of fishing trips, the mode of fishing for each fishing trip, and disposition of catch.

The following fishing modes are to be used in the 1999 Marine Recreational Fishery Statistics Survey:

- 1. **Shore mode (SH)** includes the following fishing modes:
 - a. **Man-Made Shore mode (MM)** includes fishing on all man-made shore structures such as piers, jetties or bridges;
 - b. **Beach/Bank Shore mode (BB)** includes fishing on all natural beaches or banks;
- 2. **Head/charter boat mode (PC)** in the Northeast (Region II) includes fishing on both party boats and charter boats;
- 3. Charter boat mode (CH) in the Southeast (Region III) only includes fishing on charter boats; and
- 4. **Private/rental boat mode (PR)** includes fishing on both private boats and rental boats.

Generally, the Contractor will collect the same types of data in 1999 as were collected in previous surveys except that in most states the former MM and BB modes (1979-1985) have been collapsed into the single SH mode.

In the 1999 survey, NMFS may choose to separate the head/charter boat strata into two separate strata in the Northeast. NMFS may also order sampling of the headboat strata in the Southeast region.

In previous surveys, states and other Federal organizations have funded supplemental efforts to the levels of sampling by NMFS under the original contract. These efforts have been conducted either as modification(s) to NMFS contract(s), or directly with the Contractor. For the 1993-1998 Intercept survey on the Pacific coast, a cooperative agreement existed to support sampling by state personnel through the Pacific States Marine Fisheries Commission. That agreement is expected to continue through the 1999-2001 surveys. For the 1999 survey, NMFS may pursue the development of similar cooperative agreements with the Atlantic and Gulf states, although no such agreements have been made at this time.

C.3 General Requirements

C.3.1 The Survey

The Marine Recreational Fishery Statistics Survey (MRFSS) is comprised of two major data collection tasks: a telephone household survey and an access-site Intercept survey to obtain data about marine recreational fishing. The methodology described in the MRFSS Procedures Manual (Appendix A) shall be used for each of these tasks. Sections L and M describe proposal requirements and contents for each of these tasks. In 1999, the Intercept survey shall be conducted in the regions listed below:

Region II - Northeast

Subregion 4. North Atlantic [Maine, New Hampshire, Massachusetts, Connecticut and Rhode

Island].

Subregion 5. Mid-Atlantic [New York, New Jersey, Delaware, Maryland, and Virginia].

Region III - Southeast

Subregion 6. **South Atlantic** [North Carolina, South Carolina, Georgia, and Florida East coast (Nassau County through Dade County)].

Subregion 7. **Gulf of Mexico** [Florida West coast (Monroe County through Escambia County), Alabama, Mississippi and Louisiana].

In 1999, the Intercept survey may also be conducted in the subregion listed below:

Region IV - Hawaii and West Pacific Territories

Subregion 8. Hawaii

In 1999, the telephone household survey shall be conducted in the following regions:

Region I - Pacific Coast

Subregion 1. **Southern California** [San Diego County through Santa Barbara County]. **Northern California** [San Luis Obispo County through Del Norte County].

Subregion 3. **Pacific Northwest** [Oregon and Washington].

Region II - Northeast

Subregion 4. **North Atlantic** [Maine, New Hampshire, Massachusetts, Connecticut and Rhode Island]

Subregion 5. Mid-Atlantic [New York, New Jersey, Delaware, Maryland, and Virginia].

Region III - Southeast

Subregion 6. South Atlantic [North Carolina, South Carolina, Georgia, and Florida East coast

(Nassau County through Dade County)].

Subregion 7. Gulf of Mexico [Florida West coast (Monroe County through Escambia County),

Alabama, Mississippi, and Louisiana].

In 1999, the telephone household survey may also be conducted in the following subregion:

Region IV - Hawaii and West Pacific Territories

Subregion 8. Hawaii

Other subregions in the Western Pacific (Guam, American Samoa, and the Northern Marianas Islands) and the Caribbean (Puerto Rico and the U.S. Virgin Islands) are included as supplementary options in the 1999 MRFSS.

The 1999 MRFSS specifically excludes Texas and Alaska.

The survey is conducted continuously on an annual basis on the Pacific and Gulf coasts, and the Atlantic coast of Florida, and on a 10-month basis (March - December) on the Atlantic coast north of Florida. The survey is partitioned into bimonthly sampling periods called "waves⁵⁶." January and February data on the Atlantic coast north of Florida have been collected periodically in the history of the survey and may be included in the 1999 survey. Data collected in each State includes catch (number and weight) by species and area of fishing, number of marine recreational anglers, number and length of fishing trips, fishing mode for each fishing trip, and disposition of catch.

Differences in the conduct of the survey in the three Regions are explained in detail in the appropriate subsections of the MRFSS Procedures Manual.

C.3.2 Data Collection

The data collection work is composed of two parts, an access-site Intercept survey and a Telephone survey of coastal county households. The procedures outlined for each survey will result in the data required to produce estimates of total catch, participation and effort by marine recreational anglers.

The data collection Contractor(s) shall be responsible for performing each of the following tasks:

- 1. collection of specified information by surveying households by telephone and/or by surveying individual anglers at fishing sites;
- 2. preparation of two-month progress reports (wave reports), as well as a final summary report of the data collection procedures and results;
- 3. CATI entry of telephone interview data, checking and editing of data to produce error-free data bases stored on electronic media;

 $^{^{56}}$ A "wave" is defined as a two-month sampling period, with Wave 1 corresponding to the months of January and February, etc...

- 3. Data entry, checking and editing of intercept interview data to produce error-free data bases stored on electronic media; and
- 4. timely delivery of error-free data bases to NMFS. (Error-free data is defined as data that passes through NMFS quality assurance program with no errors detected. NMFS quality assurance program will be provided to the contractor(s). An example listing is provided in the MRFSS Procedures Manual.)

The data collection tasks include, but are not necessarily limited to the following activities:

- 1. hiring, training, deployment and supervision of interviewers;
- 2. survey administration, including selection of specific sampling units to be interviewed;
- 3. data entry and checking of every entered variable for possible coding or key-entry errors identifiable as out-of-range, illogical, or unreasonable and correcting all such errors identified in the data bases;
- 4. testing of data distributions including outlier analyses as appropriate to the telephone or Intercept surveys;
- 5. proposals to modify the data collection procedures based on review of survey results; and
- 6. preparation of summary tables for use in checking, editing and reviewing the data.

The data collection Contractor(s) shall be responsible for collecting all data under this contract, as well as conducting all data entry, checking and editing according to NMFS specifications. The data collection Contractors' responsibility shall include coordination of the Intercept and Telephone household surveys with NMFS. For example, it may be necessary to reallocate the Intercept survey sampling effort by mode of fishing based on results from the Telephone survey of coastal county households. All reallocation decisions will be made by NMFS in consultation with the survey Contractor(s). All questionnaires must be approved by NMFS. All add-ons to sampling, questionnaires, or supplementary options must be approved by NMFS. Specific requirements pertaining to the Intercept or Telephone household surveys are addressed in the appropriate subsections of the MRFSS Procedures Manual.

Tiered Pricing. Table 1 shows the tiers of estimated sample sizes for each subregion and state outlined above for the 1999 telephone and Intercept surveys. There are three tiers (levels) of sampling: 1) the current sample, 2) the current sample for the Southeast Region but twice the current sample in the Northeast Region, and 3) three times the current sample in the Northeast and twice the current sample in the Southeast. The increased allocations equalize the Northeast Region towards the increase in the Southeast made in 1992 and show further increases for both regions.

NMFS expects that there might be economies of scale associated with larger sample sizes. If there are economies of scale, and unit prices vary at the different sampling levels, the unit price change will take effect when the number of samples in a state reach the new sampling levels. If Wave 1 is not ordered (and 2&6 for Maine and New Hampshire), but the sample sizes for remaining waves reaches a new sampling threshold for those waves, the new unit price will also apply.

These sample sizes represent the number of interviews to be obtained. For the telephone household survey, the sample size is the number of households to be interviewed, and does <u>not</u> include no answer/busy, refusal, non-households, or incomplete interviews of households containing recreational anglers.

For the Intercept survey, the sample size is the number of complete, usable interviews and does <u>not</u> include refusals or incomplete interviews of eligible anglers.

The approximate sample sizes shown in **Table 1** are provided only to facilitate preparation of cost estimates by prospective offerors. NMFS reserves the right to modify these sample sizes and to redistribute the sampling effort among the subregions and states prior to requiring performance of segments of work for the Intercept survey or Telephone survey over the life of the contract(s).

C.3.3 <u>Interviewer Training</u>

The Contractor(s) shall be responsible for providing interviewer training for the data collection. Training programs shall be designed to ensure quality and consistency of interviewing methods, questionnaire use, coding method, and quality checks of data. Training for interviewers for the telephone and Intercept surveys shall include a general introduction to the MRFSS and the data collection procedures and the uses of the data collected. The introduction shall be sufficient to allow interviewers to respond to general questions regarding the MRFSS. The level of training and content of the training programs must be approved by NMFS. Mandatory training requirements for the telephone and Intercept surveys are summarized in Sections C.4.1.5 and C.4.2.5 and are detailed in the MRFSS Procedures Manual. Training shall include appropriate review sessions as further specified in the Manual.

C.3.4 State/Commission Participation

NMFS will provide the Contractor(s) with a list of State fishery agencies and interstate fisheries commissions. The Contractor(s) shall work with NMFS to identify whether these state agencies or the commissions wish to add to the sample size and/or modify the content of the intercept or telephone portion of the survey, or assume responsibility for conduct of the Intercept survey in their state. These opportunities shall be in the form of subcontractual arrangements between each state and the prime contractor. This opportunity is separate from ongoing NMFS negotiations for cooperative agreements with states or commissions. Travel to meetings with individual states or groups of states to discuss participation options is required. If a state or commission chooses to participate by assuming under sub-contract the responsibilities for intercept data collection, they shall assume the identical Contractor responsibilities for survey conduct, and provide all necessary information to the Contractor to comply with **Section F - Deliveries or Performance**.

Proposals for intercept data collection must include a description of proposed state subcontract procedures, including formulas for calculating the maximum "give back" to the subcontracting state for conduct of intercept interviews and assignment of duties of the Contractor and the sub-contracting state or commission. Proposals must also include separate costs for data entry and checking of additional state samples. (*Refer to Sections H.12, Subcontract Approval, H.13 Subcontracting with State Governments.*)

Any proposed modifications by states or other entities to the survey, or State data collection of MRFSS data, must be approved by NMFS, in writing, in advance of implementation. Any add-on questions or additional sampling paid for by an entity other than NMFS, and collected through the MRFSS shall be included in the data bases provided to NMFS.

C.4 Specific Requirements

C.4.1 <u>Intercept survey</u>

C.4.1.1 Maintaining and Updating Master Site List

Assignment locations for conducting intercept interviews are drawn from a master site register developed by NMFS over the last 17 years. NMFS will provide the successful Contractor with the master site lists for each region.

Included on the master list are all identified access sites for marine recreational fishing in each state, including sites in tidal areas where marine fishes are caught, and codes indicating the anticipated fishing pressure at each site by fishing mode, by month and by day type (weekend/holiday vs. weekday). In addition, NMFS will provide files containing historical intercept data on magnetic tapes or floppy diskettes, or through computer networks. The files shall be used by the data collection contractor to validate current fishing pressure information on the master site list. This shall include deriving frequency distributions of intercept activity for weekend/weekday and time of intercept variables.

The intercept data collection Contractor shall be responsible for maintaining and updating the master site list continuously throughout contract performance, and for providing updated site lists on magnetic media to NMFS each wave. The Contractor shall review and update the information regarding fishing pressure for each site on the master site list before each wave, and shall propose methods to ensure that every site is physically inspected at least once a year to validate weekend and weekday fishing pressure estimates, descriptions of location, next nearest site by mode, information on available facilities, designations of unusual types of fishing, whether public or private access, presence/absence of night fishing, whether the site is safe at night, whether a commercial fee is charged for using the site, and name and telephone numbers of contact persons.

The location descriptions shall include directions to the site from a discrete starting point such as intersections of state or county highways, common landmarks, etc., as well as the latitude and longitude coordinates of the site measured to the nearest degree and second.

The fishing pressure data in the updated site register shall be used in conjunction with the Intercept survey sample allocations shown in Table 2 to select fishing access sites by state, mode, and wave for the intercept portion of the survey. The Contractor shall be responsible for taking measures to ensure that the interview quotas are met for each state/mode/wave sampling stratum. The procedures for proper attainment of the interview allocations are described in the MRFSS Procedures Manual and shall be the responsibility of the intercept data collection Contractor. The Procedures Manual includes specific procedures for estimating fishing pressure at sites and for selecting the sites for interviewing. All changes are subject to prior approval by NMFS.

C.4.1.2 Allocation of Sampling Effort

The approximate NMFS allocations of Intercept survey interviews by state, mode and wave for 1996 are shown in Table 2. The Intercept survey Contractor must estimate the level of sampling effort required to obtain the interview quota in each state/mode/wave stratum and distribute the sampling effort accordingly among state/mode/wave strata. Sampling effort must secondarily be distributed by day type (weekend/weekday) and between months within a wave for each coastal state in the survey area. Within each state, mode and wave, access sites for marine recreational fishing shall be randomly sampled in proportion to relative levels of fishing effort (pressure).

Initially, the intercept allocation shall be stratified as follows: 60 percent of the intercept interviews for a given state/mode/wave stratum shall be conducted on weekends (Saturday and Sunday) and holidays; the remaining 40 percent shall be conducted on weekdays. Holidays are defined as the dates on which the Federal government celebrates the following: New Years Day, Martin Luther King's Birthday, Presidents Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas Day. Future analysis of the data may change the weekend/weekday split; however, it is not anticipated to change by much (i.e. 55:45).

The intercept interview assignments shall be distributed between the two-months of a sampling period on the basis of **monthly** fishing pressure. The master site register contains estimates of **monthly** weekend and weekday fishing pressures in each fishing mode for each identified fishing site. Within months sampling effort should be distributed evenly to prevent intercepts clustering at the beginning or end of a wave. Advance approval by NMFS for the sampling distribution within a wave must be obtained prior to its implementation.

An assignment is defined as a 2-8 hour effort to intercept and interview anglers at a state, mode, site combination on a given day of the week. Assignments are drawn, before a wave begins, based on an unequal probability of selection. The fishing pressure code on the master site list is used to determine the probability weighting of each site. Assignment dates are also chosen randomly within day type (weekend or weekday). A maximum of 20 interviews may be conducted on any single assignment. An exception is made in the shore and private/rental boat modes in the southeast where a maximum of 30 interviews is allowed. In the Northeast where states add on at least 3 times the current base, up to 30 interviews per assignment are allowed for shore and private/rental boat modes.

On a given assignment, an interviewer may visit up to two alternate access sites if he/she determines that he/she is unable to obtain one usable interview per hour at the originally assigned site. An alternate site is the next nearest fishing site with fishing anticipated in the same mode. If no site expected to have fishing activity in the same mode exists within a radius of a 1-hour drive from the assigned site, then the alternate site shall be the next nearest fishing site with fishing anticipated in any mode. Further NMFS requirements for intercept site selection are found in the MRFSS Procedures Manual (Appendix A).

In the Northeast, if the head/charter boat modes are maintained as one stratum, the Contractor shall distribute intercepts between the two modes in proportion to the angler trips. The pressures on the master site register and historical data may be used to determine the proportions.

Final approval of the proposed distribution will be the responsibility of NMFS.

The Contractor shall be responsible for taking appropriate control and administrative measures to ensure that the entire sampling quota is met for each and every state/mode/wave quota that is set by NMFS (see approximate quotas in Table 2). The sampling allocation and sampling schedule by access site shall be the responsibility of the Contractor and subject to approval by NMFS. The sampling assignment schedule must be submitted to NMFS prior to its distribution to interviewers. NMFS will have 3 working days to review and approve the schedule. In addition, the Contractor shall be responsible for ensuring that the geographic and temporal distributions of sampling within a given wave for each state and fishing mode are sufficiently representative of previously estimated distributions of marine recreational fishing effort. Therefore, probability-weighted sampling should be distributed in a representative manner among different geographic areas within each state, between the two months of the wave, across the entire month, and among the different weekend days and weekdays of each month.

As data from ongoing intercept and telephone household surveys are analyzed, the Intercept survey interview allocations may be adjusted by NMFS at least one month prior to the start of a wave of sampling.

C.4.1.3 <u>Intercept Interview Procedures</u>

The design of the survey requires interviews of anglers who have completed their fishing trips. The interview shall consist of an initial set of screening questions to select marine recreational finfish anglers followed by a series of questions designed to provide the data required to produce estimates of total catch by species. No incomplete interviews or complete interviews of anglers who have not completed their fishing trips shall be accepted towards the intercept interview quotas (**Tables 1 and 2**). There is an exception to this rule for the beach-bank mode (See Appendix A). At sites where it is not feasible to interview every angler at a given site, sub-sampling procedures described in the MRFSS Procedures Manual shall be used.

The Contractor is responsible for quality control of the responses given by individuals interviewed. Special attention must be paid to species identification and to the reasonableness of the numbers of fish of each species reported by the anglers and the number observed and recorded by the interviewer. To ensure proper species identification, interviewers must have knowledge of species characteristics, geographical range, and minimum and maximum lengths and weights. Expertise in recreational fisheries, fisheries biology, and the historical Intercept survey data base shall be used by the Contractor in constructing guidelines for outlier analyses.

C.4.1.4 Intercept Interview Data

Information to be obtained from the Intercept survey shall include, but not necessarily be limited to, the following items:

- 1. The date, fishing mode, and primary geographical location of the fishing trip.
- 2. State and county of residence of each angler.
- 3. Gear used, trip duration, and hours fished during the trip for which the angler is interviewed.
- 4. Fishing activity by the respondents in the past 60 days and the past 12 months.
- 5. Numbers by species of finfish available for identification.

- 6. Respondent's estimates of numbers and species of finfish caught but not available for identification, including those released alive.
- 7. Disposition of the catch.
- 8. Length and weight of all finfish available for identification. (Required equipment and procedures to be used by interviewers is described in the MRFSS Procedures Manual.)
- 9. A procedure to specifically identify and code specific geographical location of an angler's effort and catch will be developed by NMFS and the intercept data collection Contractor. Examples of codes which could be used are: latitude/longitude, LORAN C readings, site specific names, specially developed grid systems, etc.

All species in an angler's catch will be measured and weighed unless the angler refuses to cooperate. If the angler has caught more than fifteen fish of a particular species, then a random sample of fifteen fish of that species will be selected for measuring and weighing. NMFS is considering more practical random sampling procedures compared to past specifications, and suggestions of better methods by offerors are encouraged.

Besides the basic questions concerning the angler's trip, catch and effort, NMFS reserves the right to add up to ten questions per interview which may vary geographically and temporally to address specific resource management concerns (for example: marine mammal or sea turtle sightings, attitudes and opinions concerning management options, basic economic questions). NMFS reserves the right to make minor changes to the existing questionnaire in order to improve response rates or accuracy of the responses.

In the past, NMFS reserved the right to add up to five questions per interview; however, for some needs such as basic economic modeling, five questions were too limiting. In general, eight to ten questions provided the necessary level of data. In practice, these additions to the questionnaires have been found to add little or nothing to the cost of conducting the interviews, and they have not affected overall response rates. NMFS is concerned with possible affects of unnecessarily long interviews and will keep the number, length, and complexity of these questions to a minimum.

Sample intercept questionnaires are included in the MRFSS Procedures Manual (Appendix A, Attachment G).

C.4.1.5 <u>Interviewer Training and Supervision</u>

The Contractor shall be solely responsible for locating, hiring, training and supervising persons who will conduct the intercept interviews. Interviewers must have expertise in the identification of marine finfish, as well as the necessary communications skills to ensure successful interviewing techniques. Training and level of fish identification expertise proposed by a Contractor must meet or exceed required NMFS specifications in the MRFSS Procedures Manual. Trained interviewers, supervised by the Contractor, shall conduct all interviews with the anglers.

C.4.1.5.1 Interviewer Training

While interviewer training requirements are described in detail in the MRFSS Procedures Manual, the following is a summary of the minimum requirements.

- 1. An introduction to the objectives, goals, sponsorship and operation of the survey.
- 2. Interviewers will be provided with a copy of the Intercept survey Procedures Manual, copies of the Privacy Act policy, the URL for the MRFSS web site, and all other necessary documents and forms.
- 3. Proper procedures for conducting an interview and coding responses on the intercept data form.
- 4. Interviewers must be able to correctly identify at least the twenty most frequently caught species of finfish in their subregion. Identifications must be based on direct observation of fish and they must be correct at the species level of identification. Using identification keys provided by the Contractor, interviewers shall be trained in the use of keys for all species likely to be encountered in the interviewer's sampling area. In areas with high species diversity, the Contractor is encouraged to expand the number of species required to be identified correctly.
- 5. Interviewers must be taught principles and techniques of random sampling so that decisions on subsampling fish for measurement and sub-sampling anglers at high-use sites can be properly implemented under field conditions.
- 6. Interviewers shall be informed of sources of local information on fishing activity.
- 7. Interviewers shall be informed of procedures for maintaining the site list and for estimating fishing pressures at sites on the list.
- 8. Interviewers shall be informed of procedures for selecting appropriate alternate sites for interviewing.
- 9. Interviewers shall be informed of appropriate attire and how to present themselves in a professional manner.

Testing of all potential interviewers shall include, but is not necessarily limited to, the following:

- 1. accurate identification of common fish in the field and proper use of keys when unusual fish are encountered;
- 2. proper conduct of interviews;
- 3. effective handling of people and a range of problems encountered in the field;
- 4. knowledge about the survey;
- 5. proper coding of the interview and site summary forms; and
- 6. proper procedures for randomly selecting anglers to interview.

C.4.1.5.2 <u>Interviewer Supervision and Quality Control</u>

Intercept interviewers shall be supervised by a field supervisor with extensive field interviewing experience and training in fish identification in the geographic area under supervision. The field supervisors' role shall include the following:

- 1. training and supervision of Intercept survey interviewers,
- 2. spot-checking of interviewers on assignment,
- 3. Intercept survey interviewing as needed to meet quotas,
- 4. regularly maintaining contact and exchanging information with each interviewer,
- 5. reviewing and maintaining site lists,
- 6. serving as a liaison with other local or state survey efforts,

- 7. attending three wave review meetings a year to review data and address field procedure issues as they arise, and
- 8. reviewing at least the first 100 completed intercept coding forms submitted by new interviewers.

All forms completed and submitted by new interviewers for their first five assignments shall be handled separately and checked for completeness, accuracy and adherence to the procedures outlined in the Procedures Manual. New interviewers are defined as interviewers with no previous experience conducting interviews for the MRFSS. Each interview form shall be completely edited for accuracy, completeness, legibility, and consistency by the interviewer and a supervisor prior to data entry. Special attention shall be directed at errors in biological reasonableness, species identification, completeness and consistency of coding. Remedial action, including training, suspension or termination shall be taken whenever appropriate. Field supervisors will not see interview forms submitted by fully trained interviewers; however, they will be responsible for resolving problems detected during data entry and subsequent review of the forms.

Field supervisors shall observe and provide further training to each new interviewer during his/her first field assignment. Additional field observations and training of new interviewers must be conducted as needed until the Contractor can ensure the intercept interviews are being conducted in accordance with the MRFSS Procedures Manual. Following initial field training, all interviewers shall be observed in the field by a field supervisor at least once every six months.

Field supervisors shall be regularly kept informed by the Contractor of issues (e.g. regulation changes, quota closures, and proposed management changes) in the recreational fishery in their interviewing area using appropriate communications (e.g. newsletters, phone calls, web notices, telefax). Field supervisors will communicate these issues to the field interviewers. Referral lists for additional information, including phone numbers for local, state and federal resource management agencies in each area are to be provided by the Contractor.

For each two-month period, ten percent of the interview forms for each interviewer shall be randomly selected for validation. Respondents shall be contacted by phone by the data collection Contractor. A sample form and information to be verified is detailed in the MRFSS Procedures Manual to determine if the interview was conducted properly. If interviewer problems are suspected, the validation rate should be increased to investigate the problem. Open ended conversations by experienced contract personnel with interviewed respondents is also a technique that should be employed when problems are suspected. NMFS may also elect to ask up to five additional questions during the validation interview and will provide such questions to the data collection Contractor at least one month prior to the start of each wave. Validation results shall be included in administrative wave reports.

C.4.1.6 Reporting Requirements

For the Intercept survey, the Contractor shall prepare and submit a report of Intercept survey activities and results. These data are to be provided (paper and magnetic files) to NMFS on a bimonthly basis as required in Section F, Deliveries or Performance. The report shall include, but not necessarily be limited to the following:

- 1. a complete accounting of all assignments drawn for each Subregion, State, mode and wave and for each interviewer which shall include:
 - a. numbers and percentages of ineligible people intercepted as determined by screening questionnaire results (e.g., commercial, incomplete trip),
 - b. numbers and percentages of eligible anglers not interviewed by reason for exclusion (e.g. refusal, language barrier, harassment by individual other than angler intercepted, etc.),
 - c. numbers and percentages of primary assignments not completed by reason for failure (e.g. weathered out, no fishing activity at assigned site, harassment by individuals at assigned site, etc.),
 - d. numbers and percentages of completed assignments that include visits to alternate sites, as well as numbers and percentages of completed interviews obtained at alternate sites,
 - e. numbers and percentages of assignments where no interviews were attempted,
 - f. numbers of potentially eligible anglers not intercepted due to inability of interviewer to intercept while interviewing another angler,
 - g. the distribution of interviews obtained and estimated fishing effort as recorded in the site register among counties within each state and fishing mode;
- 2. results of supervisory field visits;
- 3. results of telephone validation of intercept interviews;
- 4. tabulations of the residence of intercepted anglers by mode, State and subregion for:
 - a. coastal in-State residents (telephone household survey area),
 - b. remainder of coastal state residents,
 - c. out-of-state residents;
- 5. distributions of interview times by hour, state, and mode;
- 6. numbers and percent of fish weighed and measured by state, mode and species.
- 7. summaries of selected variables from the Intercept survey showing means for the following: hours fished per trip, days fished in this state in the last 2 months and 12 months, and telephone ownership by State and subregion;
- 8. ranked summaries of the numbers of the top 25 species caught and total number of fish caught by subregion and wave and the minimum and maximum lengths of each species caught;
- 9. results of any of the optional questions; and
- 10. recommendations and proposals for change based on Intercept survey results, including plans to increase sampling efficiency, minimize variance, enhance participation and cooperation of respondents and/or coastal states, or increase the visibility and usefulness of the MRFSS to the public.

Sample activity data shall be maintained on magnetic media in a form that would allow each assignment and its outcome to be quantified (database, ASCII or spreadsheet, not word processing) and integrated with the identification code from the intercept form. Intercept interview data also shall be maintained on magnetic media, according to the file description in the Procedures Manual. These data shall be delivered to NMFS through computer networks or on magnetic tape or diskette following the monthly delivery schedule. Data base naming conventions and variable names and codes are included in the MRFSS Procedures Manual.

C.4.1.7 Special Intercept Data Collection Exceptions

The following are exceptions to the Intercept survey data collection requirements:

- 1. Unless ordered by NMFS, no intercept data shall be collected from anglers who fished from boats surveyed by the NMFS Headboat Survey in the South Atlantic and Gulf of Mexico subregions. Intercept interviews in the "Party/Charter boat" fishing mode will be conducted only with charter boat anglers in these subregions. A charter boat is defined as a boat for hire which is hired by an individual or group for exclusive use by that individual or group. A charter boat may carry any number of individuals but typically carries 6 or fewer. In some areas, charter boats carrying 1 to 4 passengers are also called guide boats. NMFS will provide a list of boats that are to be excluded on an annual basis or more often as updates are made.
- 2. Although pricing should be provided on a per interview basis for all waves, states and modes, in most years no intercept samples are ordered in certain waves and areas (i.e. Wave 1 on the Atlantic coast north of Florida, Wave 2 and 6 in Maine and New Hampshire). Individual states under separate contract may conduct or pay the Contractor to conduct intercept interviews in those waves and areas.
- 3. No intercept data will be collected in Texas or Alaska.
- 4. Intercept interviews shall not be conducted at weighing stations for fishing tournaments. For purposes of the MRFSS, "fishing tournaments" are defined as fishing contests of seven or fewer days which are directed at specific species or groups of species such as king mackerel, Spanish mackerel, marlin, tunas, sharks, dolphin, bluefish, and striped bass.
- 5. All anglers fishing outside the U.S. Exclusive Economic Zone (i.e., in foreign waters Canadian, Mexican, Bermudian, etc.) and returning to U.S. ports are not included within the scope of this survey and are specifically excluded, although they should be tallied on the interview summary form.

C.4.2 Telephone Household Survey

C.4.2.1 Allocation of Sampling Effort

This data collection task is to conduct household surveys by telephone in the coastal counties in each region. Coastal counties are: (1) those counties which border on marine waters, including areas where marine species of finfish are caught, and (2) those counties any part of which is within a distance from shore specified by NMFS. Counties included in the telephone household survey are listed in **Table 4**.

Past MRFSS results indicate that for most geographical areas, a distance of 25 to 50 miles from the coast includes the population accounting for 70-80 percent or more of the total fishing trips in the state. The telephone household survey is conducted in all counties within 25 miles of the coast in all waves for which intercepts are conducted. In subregions 6 and 7, coastal counties within 50 miles of the coast are included in the dialing area frame from May through October (Waves 3 through 5). Due to special residence and fishing participation patterns, the telephone household survey in North Carolina includes all counties within 50 miles of the coast during Waves 1, 2, and 6 and all counties within 100 miles of the coasts during Waves 3, 4 and 5.

For the Pacific Coast, the distance varies due to the large size of the counties, and may extend beyond 25 miles in many areas.

Table 3 indicates the approximate telephone household survey sample allocations at tiered sampling levels and by state and wave for the Atlantic, Gulf and Pacific coasts. These allocations are provisional and subject to revision at least one month prior to each sampling wave throughout performance of the Telephone survey contract. More complete approximations of the sample allocations at tiered sampling levels by state, county, and wave are included in **Table 4**.

C.4.2.2 Selection of Households

Activities specific to the selection of the dialing samples for the household Telephone survey include:

- 1. Maintaining and updating on a wave by wave basis the list of telephone exchanges covering the coastal counties specified by NMFS.
- 2. Identifying and selecting blocks of residential numbers in these counties.
- 3. Generating telephone numbers within blocks using the random-digit dialing procedures described in the MRFSS Procedures Manual.

C.4.2.3 Telephone Household Survey Procedure

All interviewing should be done through a Computer Assisted Telephone Interviewing (CATI) system. This requirement is due to the increased efficiencies of CATI over manual paper surveys, and due to the increase in accurate coding through reduction of errors introduced by secondary data entry. CATI systems also increase accuracy through built-in probes and error checks.

The sample frame for the telephone household survey includes all full-time, occupied housing units within the coastal counties included in the dialing area for each sampling period. The telephone numbers generated shall be checked to avoid duplication and to ensure that no household shall be included in the sample more than once during the wave. Sampling with replacement across waves is allowed. However, to avoid sampling biases the Contractor shall ensure that no more than 1 percent of the households contacted are included in the sample more than once during the year. Occupied housing units should not include institutional housing such as boarding schools, college dorms, military barracks (although homes on military bases may be included), prisons, halfway houses, and monasteries. An adjustment for these trips is obtained through the Intercept survey.

Historical data on the number of no answer/busy, refusal, non-household, and incomplete interviews shall be used to estimate the size of the initial sample draw. These data will be provided by NMFS, upon request, to offerors and the Telephone survey Contractor shortly after contract award. Once a sample is drawn, all numbers in the sample should be completed.

Additional draws may be conducted if an underage in quota of completed household interviews occurs; however, all the numbers in the additional draws must be completed. Completed means all numbers in the draw are resolved to fishing and non-fishing households or ineligible number (business, institutional housing, etc.).

All calls shall be made by experienced telephone interviewers, trained and supervised by the Contractor. The specified number of households to contact shall be exclusive of dialing results of no-answer/busy, refusals and non-households. A minimum of five calls to each number shall be attempted to screen for households with anglers who are eligible for interview. In no subregion should the percentage of final no-answer/busy results exceed ten percent of the total calls attempted. A minimum of five scheduled callbacks per household shall be used to obtain interviews with anglers in known fishing households. The Contractor shall attempt to interview all individuals in a household reporting marine fishing activity during the sample period. The percent of two-month fishing households where no angler is interviewed shall not exceed five percent in any state and wave.

A two-month (60-day) recall period shall be used to obtain fishing trip information. All data collection by telephone shall be made in a two-week period at the end of each wave (i.e. the last week of the two-month period being surveyed and the first week of the next two-month period). In certain areas of the United States, a language barrier may exist, therefore, some specially qualified interviewers may be needed to interview non-English speaking households and anglers.

The following procedures shall be used in obtaining fishing trip information from dialed residential households:

- 1. Households shall be screened to determine if any member of the household has gone marine recreational fishing during the past twelve months and then to determine if anyone has gone in the previous two months. If any person has fished in saltwater in the previous two months, then he/she is an eligible respondent.
- 2. All eligible anglers shall be asked to recall their total number of fishing trips made in the past two months, and then are asked for details on each trip, including their fishing trip dates, and modes and areas of fishing, beginning with the most recent and working backwards in time for 2 months.
- 3. If the angler cannot recall details about all the trips within the 2-month period, the interviewer shall attempt to determine the mode of all remaining trips.

At least one interviewer per shift shall speak Spanish. All contacts requiring a Spanish-speaking interviewer must be referred to this interviewer who will administer the questionnaire using a Spanish translation. The Spanish translation shall be a part of the CATI system.

C.4.2.3.1Special Trips

Some marine recreational trips may need to be excluded from the estimation procedures due to overlap with other sampling programs, to maintain historical comparability, or other survey considerations. These data are obtained by the contractor as part of the routine interview, and should not be discarded. There is value in these data in terms of validation, comparison studies, and exploration of new estimation procedures. Beginning in

1996, these data have been retained in the data base and are flagged for identification, if necessary. Flag variable names and codes are described in the MRFSS Procedures Manual. The following comprise trips to be retained.

- 1. Trips made to other coastal states.
- 2. Trips where anglers targeted salmon under the following circumstances:
 - a. Southern California: Trips to Mexico or the Salton Sea.
 - b. Northern California: Trips where boat anglers directed their fishing effort for any species of salmon (Oncorhynchus spp.).
 - c. Oregon: Boat anglers fishing in the ocean.
- 3. All fishing trips in foreign waters (Canadian, Mexican, Caribbean, etc.) and returning to U.S. ports.
- 4. Charter or party boat trips made by fish guides, captains and crew as part of their business.

C.4.2.3.2 Obtaining Proxy Data

Proxy data is information obtained from someone in the fishing household <u>other than</u> the angler. In cases where an angler cannot be interviewed, the collection of proxy data is preferable to missing data. To maintain consistency and ensure accuracy from year to year, the following guidelines for collection of proxy data are employed: (1) asking specific questions before obtaining proxy data; (2) prioritizing information collected (trips, then mode, then dates); and (3) omitting questions regarding detailed trip information after the first "don't know" response. Telephone interviewers will continue to make at least five callbacks to interview an angler before proxy data is taken. If a proxy respondent does not know the total number of trips made in the last two months, no proxy data is obtained. Proxy data is identified as such in the telephone data sets.

C.4.2.4 Telephone Household Survey Data

Information to be obtained from the marine recreational fishing households contacted includes, but is not limited to:

- 1. The number of people fishing during the past 2 months and during the past 12 months,
- 2. The total number of fishing trips during the past 2 months for each person,
- 3. The date, mode, geographical location of fishing (Pacific coast only), and type of access (public vs private) for each trip during the previous 2 months for each person,
- 4. State and county of residence, and
- 5. Time of completion of each fishing trip.

Besides the basic questions concerning the angler's trip, catch and effort, NMFS reserves the right to add up to ten questions per household or 2-month saltwater fishing participant or, five questions per trip for saltwater participants which may vary geographically and temporally to address specific resource management concerns (for example: marine mammal or sea turtle sightings, attitudes and opinions concerning management options, basic economic questions).

In the past, NMFS reserved the right to add up to five questions per interview; however, for some needs such as basic economic modeling or determining the extent of subsistence fishing, five questions were too limiting. In general, eight to ten questions provided the necessary level of data. In practice, these additions to the questionnaires have been found to add little or nothing to the cost of conducting the interviews, and they have not affected overall response rates. NMFS is concerned with possible affects of unnecessarily long interviews and will keep the number, length, and complexity of these questions to a minimum.

NMFS must approve any questionnaire changes, and will submit any supplemental questions to the Contractor 30 days before the beginning of the dialing period for each wave.

Sample telephone questionnaires are included in the MRFSS Procedures Manual (Appendix A). NMFS reserves the right to make minor changes to the existing questionnaire in order to improve response rates or accuracy of the responses.

C.4.2.5 Interviewer Training and Supervision

The Contractor shall be solely responsible for locating, hiring, training and supervising persons to serve as interviewers for the telephone household survey. NMFS must approve the training and level of expertise required.

C.4.2.5.1 Interviewer Training

All training programs for telephone interviewers shall include, but not necessarily be limited to, the following:

- 1. an introduction to the objectives, goals and operation of the Survey,
- 2. proper procedures for conducting an interview,
- 3. key-entering response data into a Computer Assisted Telephone Interviewing (CATI) System data base.
- 4. detailed descriptions of variables such as fishing mode, fishing area, private versus public access, and target species; and
- 5. interviewers will be provided with a copy of the Telephone survey Procedures Manual, copies of the Privacy Act policy, the URL for the MRFSS web site, and all other necessary documents and forms.

Testing of potential interviewers shall include but not necessarily be limited to the following:

- 1. the ability to deal effectively with people and a range of problems encountered during a telephone interview,
- 2. knowledge about the survey, and
- 3. proper use of standardized CATI System questionnaires;

Further telephone interviewing procedures are detailed in the MRFSS Procedures Manual.

C.4.2.5.2 Interviewer Supervision

Interviewers shall be supervised by persons with experience and/or training in conducting telephone interviews. Supervision shall include direct observation of interviewer procedures and review of interview records entered by each interviewer. The Contractor shall propose a process for extensively monitoring interviews conducted by each new interviewer during their first interviewing session, including rate of supervision and length of initial monitoring. The Contractor shall also propose the routine level of monitoring for experienced interviewers. Remote monitoring by NMFS personnel is a desirable capability.

The Contractor is responsible for validating the responses of individuals being interviewed. This shall be implemented through remote monitoring of each interviewer's interviews and/or callbacks to ensure that ten percent of all interviews are independently verified for correct survey protocol and accurate recording of key survey information. Remedial action shall be taken whenever appropriate. Interviewers shall be kept informed of developments in the recreational fisheries being surveyed, and shall be able to refer respondents to the MRFSS staff for further information.

Validation results shall be reported in administrative wave reports and administrative data bases described below.

C.4.2.6 <u>Telephone Household Survey Reporting Requirements</u>

For the telephone household survey, the Contractor shall prepare and submit a report of Telephone survey activities and results. These data are to be provided to NMFS on a bimonthly basis as required in **Section F**, **Deliveries or Performance**. The report shall include, but not necessarily be limited to, the following:

- 1. a complete accounting of all calls (in numbers and percentages) made (by subregion, state, and wave) by disposition as listed below:
 - a. number of non-households (businesses, institutions, etc.),
 - b. number of households with status not determined due to refusal,
 - c. number of households with status not determined due to no answer/busy,
 - d. number of households with no people who fished in the previous 12 months,
 - e. number of households with people who did not fish in the previous 2 months but did fish in the previous 12 months,
 - f. number of households with people who, on first contact, indicated two-month fishing activity, but on later contact were found to have no two-month fishing activity,
 - g. number of eligible households (one or more people fishing in the previous 2 months) with complete interviews,
 - h. number of eligible households with proxy interviews,
 - i. number of eligible households with incomplete interviews due to refusals,
 - j. number of eligible households with incomplete interviews for other reasons (such as language barrier or failure to contact after repeated attempts),
 - k. number of households with fishing status known but eligibility not determined;
 - 1. number of households where no interviews were conducted due to connection with an answering machine or other recording device;

- 2. proportion of households contacted that did not have English-speaking residents;
- 3. sample overview by day of the 2-week dialing period;
- 4. gender distribution of first household respondent;
- 5. validation results;
- 6. proportion of total households contacted that reported fishing activity (2-month and 12-month);
- 7. average number of fishing trips reported per angler by mode and state;
- 8. distribution of boat trips by type of access (private vs public);
- 9. distribution of times fishing trips ended by state and mode;
- 10. number of out-of-state fishing trips by state and mode;
- 11. Head/charter boat outlier reports with callback attempts and results;
- 12. results of any of the optional questions; and
- 13. recommendations and proposals for changes to address problems in the conduct of the Telephone survey.

Sample activity data (Nos. 1-5 above) shall be maintained on magnetic media in a form that would allow the above tabulations and merging to be made at the county level. Telephone interview data also shall be maintained on magnetic media with resolution to the trip level. These data shall be delivered to NMFS through computer networks or on magnetic tape or diskette following the delivery schedule. Data base naming conventions and variable names and codes are included in the MRFSS Procedures Manual.

C.4.3 Data Handling for Telephone and Intercept surveys

C.4.3.1 Data Entry

Besides the CATI system required for the telephone component, the Contractors shall consider the use of automated data recording technology to reduce costs, improve data quality, or improve timeliness of the data. Automated data recording technology could include, but is not limited to Optical Character Recognition, handwriting recognition (i.e. laptop computers with an electronic stylus), bar codes, electronic clipboards, magnetic or electronic fish measuring boards, field data recorders, Web TV's, etc.

1. Intercept Data Entry

- a. The Contractor shall use a data entry program provided by NMFS. The data entry program is under development and will be designed to run on commonly available software (i.e. MS Access, SAS). A prototype data entry program will be placed on **the MRFSS web site** (http://remora.ssp.nmfs.gov/mrfss) for examination by offerors. The data entry program employs logical checks to prevent incorrect coding entries and to flag illogical entries.
- b. If an automated data recording technology becomes available for on-site intercept interview recording, NMFS will work with the Contractor to develop acceptable procedures.

2. Telephone Data Entry

- a. The Contractor shall use a CATI system for data entry during interviewing.
- b. The Contractor may propose other forms of automation to replace or supplement CATI, or to improve support activities.

C.4.3.2 Data Recording

The Contractor shall place on floppy diskette, CD-ROM, or transfer through computer networks, all data collected for each bimonthly period from the Intercept survey and the telephone household survey. NMFS shall provide the successful Contractor with the required data formats and file naming conventions. All magnetic files will be in a format that allows manipulation and analysis (ASCII, data base, SAS, spreadsheet, but not word processing file). Data to be provided include, but are not necessarily limited to the following:

1. Intercept survey Data

- a. Site registers: 1 magnetic copy. Site information shall be provide in a format specified by NMFS.
- b. Intercept data shall be provided to NMFS in a magnetic file after all data have been thoroughly edited and cleaned as prescribed below.
- c. Magnetic and 1 paper listing of interview records that contain fish species, numbers, weights, and lengths in a format prescribed by NMFS (Example in MRFSS Procedures Manual).
- d. Magnetic file(s) containing the assignment data, including but not limited to: interviewer code and fishing mode; disposition of the assignment (completed, alternate site, canceled); mileage to the site; tallies of intercept samples completed by fishing mode, eligible anglers at each interview site who were not interviewed by category (refused, language barrier, harassment, etc.), ineligible people intercepted by screening category, people missed during conduct of another interview.

2. Telephone survey Data

- a. Magnetic file containing the number of two-month-fishing and non-two-month fishing households by state and county, and number of households with two-month fishing activity on first contact but no fishing activity on subsequent contacts.
- b. Magnetic file containing completed interviews.
- c. Magnetic file(s) containing the sample activity summary data described in C.4.2.6)
- 3. All magnetic computer files shall be fully documented. Documentation shall include, but not necessarily be limited to, the following:
 - a. Characteristics of the files (e.g., record formatting characteristics; number of records in each file; data format);
 - b. Diskette and Bernoulli disk documentation shall include a directory tree if appropriate and a listing of each directory.
 - c. A description of file content including the project name; year and wave of data; date generated; person to be contacted; and other pertinent descriptive information.

C.4.3.3 Data Editing

The Contractor(s) performing data collection shall be responsible for data editing and delivering error-free data on the initial delivery date. Error-free is define as data that will pass through NMFS quality control error-checking program (see example in MFSS Procedures Manual) with no errors detected. Every recorded variable shall be checked for data entry errors, range, logic and reasonableness.

Questionable records identified by the error-checking program must be examined by the Contractor. For the Intercept survey, this may mean consulting the interviewer. For the Telephone survey, this may mean a callback to the household or angler. Possible errors may also be detected during the wave review meetings and those data must be examined by the Contractor(s). If errors are found after the wave meetings error checking process, the Contractor(s) shall be responsible for correcting the data within one month of the end of the wave meeting, if the error was allowed or caused by the Contractor(s).

Offerors are required to include in their proposals a complete description of the quality control processes to be employed for ensuring accurate data entry, editing and outlier analyses. Proposals lacking well-defined methods of quality control shall be considered non-responsive. Quality control processes for ensuring accurate data entry and editing the data must be approved by NMFS prior to their implementation. Copies of the editing programs used in the 1998 surveys shall be provided to the successful data collection Contractor(s), but shall not be assumed to be complete or accurate for purposes of this solicitation. New error checks continue to be developed by NMFS and suggestions from the Contractor(s) are encouraged. The data formats, units of measure, and coding used for the intercept and telephone household survey data shall be provided by NMFS and shall be the same for all Regions.

Examples of Intercept survey editing include the following: editing for duplicate identification numbers; correct state, county, and site codes; correct coding by disposition on the fish records, reasonableness with regard to occurrence of a fish species within a region, area or mode; reasonableness of species catch data including number caught, lengths and weights; reasonableness of fishing hours and number of days spent fishing; and geographical distribution of anglers interviewed by county and state of residence.

Examples of editing checks for the telephone household survey data include the following: editing for duplicate identification codes, state and county of residence, state and county of fishing trip, and reasonableness of the trip information for fishing (i.e., number of trips by mode of fishing by state and subregion, number of people fishing during the previous 12 months and 2 months, etc.). The historical MRFSS data base from the telephone household surveys shall be used by the successful Contractor for constructing criteria and performing outlier analyses.

C.4.3.4 Transmittal of Data to NMFS

Error-free data collected from the intercept and Telephone surveys shall be sent to NMFS on magnetic media, or through computer networks, following completion of the data collection for each month or wave as specified in **Section F - Deliveries or Performance**.

C.4.4 Supplemental Sampling

C.4.4.1 Conducted by Both Intercept and Telephone Contractors

C.4.4.1.1 Economic Data Collection (Appendix B)

Appendix B details a request for proposals on supplemental economic data collection tasks for developing economic value/demand and expenditure/impact models to be performed by the Intercept survey Contractor and the telephone Contractor.

C.4.4.1.2 Caribbean and West Pacific U.S. Territories (Appendix C)

Appendix C details a request for proposals to conduct a marine recreational fishing survey in the U.S. Territories. Intercept sampling by the Intercept Contractor for catch information would follow the procedures of the routine MRFSS. Sampling for effort might be done by the Telephone Contractor as specified for the current MRFSS Telephone survey; however, because of the paucity of phones and possible gaps in census data, sampling for effort might involve roving counts of access sites. Roving counts would be conducted by the Intercept contractor.

C.4.4.1.3 Freshwater Tidal Zone (Appendix D)

Appendix D details a request for proposals to create a new sampling strata for the tidal and freshwater zones in order to obtain complete estimates for anadromous and catadromous fishes (salmon, striped bass, herring and shad, American eel). The Intercept Contractor would create a separate strata for sampling, including building a new component of the master site register. The Telephone Contractor would need to add questions to the routine survey to probe for more exact locations when river is the area fished. The telephone dialing zone may also be expanded to include counties bordering on rivers in the anadromous/catadromous zone. This option is highly experimental and would be conducted in Maryland, New Hampshire, and Oregon during the period of contract performance.

C.4.4.2 <u>Conducted by Intercept Contractor</u>

C.4.4.2.1 <u>Biological Data Collection (Appendix E)</u>

Appendix E contains a request for proposals on a supplemental biological data task. The purpose of this work is to obtain additional length frequency samples for selected species and to collect otoliths, scales or other parts for aging fish.

C.4.4.2.2 Build and Maintain Charter Boat Frame (Appendix F)

Appendix F details a request for proposals for building and maintaining a frame of charter boats on the Atlantic coast for use in a separate survey of charter boat fishing effort.

C.4.4.3 Conducted by Telephone Contractor

C.4.4.3.1 Pacific Halibut Fishery (Appendix G)

Appendix G describes a request for proposals to conduct a Telephone survey in Washington State based on a discrete sample frame of licensed anglers with Pacific halibut permits.

C.4.4.3.2 <u>Use License Sampling Frame (Appendix H)</u>

Appendix H describes a request for proposals to conduct a Telephone survey in one or more states that have a discrete sample frame of licensed anglers with that is useable as a routine sampling frame. NMFS will be responsible for providing an automated sample to the Contractor.

C.4.4.3.3 Survey of Charter and Party Boat Operators (Appendix I)

Appendix I describes an alternate method to estimate effort for the charter and party boat fishing modes in the Atlantic and Gulf of Mexico. It uses a focused sampling frame of known charter and party boat operators compiled by the Intercept Contractor.

C.4.4.3.4 Survey Inland Counties of Coastal and Non-Coastal States (Appendix L)

Appendix J describes a pilot survey to expand the routine telephone survey to the non-coastal counties of coastal states and to non-coastal states, in order to improve the variance of the survey caused by the coastal county/non-coastal county ratios. The telephone sampling follows the routine procedures of the current MRFSS. Pennsylvania will be considered a coastal state for this option.

C.5

TABLES

Table 1. Approximate Number of Intercept and Telephone survey Interviews Allocated by Subregion, State and sampling Level

			Current	Sampling	N.	Ex2	NEx3, S	SE&PCx2
Region	Subregion	State	Intercep	Telephon e	Intercep t	Telephon e	Intercep t	Telephon e
Pacific Coast	California	So. California	0	22617	0	22617	0	45234
		So. California	0	21549	0	21549	0	43098
	Pacific Northwest	Oregon	0	12438	0	12438	0	24876
		Washington	0	16396	0	16396	0	32792
	Region Total		0	73000	0	73000	0	146000
Northeast	North Atlantic	Connecticut	1221	4147	2442	8294	3663	12441
		Maine	1120	2858	2240	5716	3360	8574
		Massachusetts	2182	8819	4364	17638	6546	26457
		New Hampshire	663	3778	1326	7556	1989	11334
		Rhode Island	1032	3594	2064	7188	3096	10782
		Subregion Total	6218	23196	12436	46392	18654	69588
	Mid-Atlantic	Delaware	965	3155	1930	6310	2895	9465
		Maryland	2229	8319	4458	16638	6687	24957
		New Jersey	3657	14401	7314	28802	10971	43203
		New York	2999	11386	5998	22772	8997	34158
		Virginia	2040	7525	4080	15050	6120	22575
		Subregion Total	11890	44786	23780	89572	35670	134358
	Region Total		18108	67982	36216	135964	54324	203946
Southeast	South Atlantic	Florida (East)	11277	44377	11277	44377	22554	88754
		Georgia	1527	4828	1527	4828	3054	9656
		North Carolina	6479	23344	6479	23344	12958	46688
		South Carolina	2578	9060	2578	9060	5156	18120
		Subregion Total	21861	81609	21861	81609	43722	163218
	Gulf of Mexico	Alabama	1507	4868	1507	4868	3014	9736
		Florida (West)	13512	51361	13512	51361	27024	102722
		Louisiana	3707	11868	3707	11868	7414	23736
		Mississippi	1528	4954	1528	4954	3056	9908
		Subregion Total	20254	73051	20254	73051	40508	146102
	Region Total		42115	154660	42115	154660	84230	309320
West Pacific	West Pacific	Hawaii	7000	3195	7000	3195	14000	6390
		Subregion Total	7000	3195	7000	3195	14000	6390
	Region Total		7000	3195	7000	3195	14000	6390
Grand Total			67223	298837	85331	366819	152554	665656

Table 2. Approximate Intercept Interview Quotas by State, Wave, Fishing Mode and Sampling Level

Current Sample Size

				WA	VE			ANNUAL
State	Fishing Mode	1	2.	3	4	5	6	TOTAL
Connecticut	Shore	37	42	51	99	68	37	334
	Party/Charter Boat	31	31	35	57	41	31	226
	Private/Rental Boat	49	46	157	243	117	49	661
	State Total	117	119	243	399	226	117	1,221
Maine	Shore	32	32	41	86	46	32	269
	Party/Charter Boat	32	32	32	48	48	32	224
	Private/Rental Boat	39	39	118	129	263	39	627
	State Total	103	103	191	263	357	103	1,120
Massachusetts	Shore	38	37	198	217	170	38	698
	Party/Charter Boat	35	48	61	98	70	35	347
	Private/Rental Boat	54	37	280	517	195	54	1,137
	State Total	127	122	539	832	435	127	2,182
New Hampshire	Shore	32	32	40	47	31	32	214
	Party/Charter Boat	32	32	55	39	34	32	224
	Private/Rental Boat	20	20	57	68	40	20	225
	State Total	84	84	152	154	105	84	663
Rhode Island	Shore	37	37	86	81	87	37	365
	Party/Charter Boat	34	33	40	42	38	34	221
	Private/Rental Boat	37	33	92	156	91	37	446
	State Total	108	103	218	279	216	108	1,032
Delaware	Shore	47	33	57	68	57	47	309
	Party/Charter Boat	33	33	45	51	34	33	229
	Private/Rental Boat	35	37	92	142	86	35	427
	State Total	115	103	194	261	177	115	965
Maryland	Shore	43	91	104	122	105	43	508
	Party/Charter Boat	38	36	59	100	69	38	340
	Private/Rental Boat	103	67	275	451	382	103	1,381
	State Total	184	194	438	673	556	184	2,229
New Jersey	Shore	111	69	135	207	170	111	803
	Party/Charter Boat	53	84	118	263	178	53	749
	Private/Rental Boat	142	134	435	744	508	142	2,105
	State Total	306	287	688	1,214	856	306	3,657
New York	Shore	42	59	116	207	140	42	600
	Party/Charter Boat	63	70	135	180	100	63	611
	Private/Rental Boat	116	96	453	647	354	116	1,782
	State Total	221	225	704	1.034	594	221	2,999

Table 2. (Continued)

Current Sample Size

Current Sample Si				WA	VE			ANNUAL
State	Fishing Mode	1	2	3	4	5	6	TOTAL
Virginia	Shore	48	39	100	136	97	48	468
J	Party/Charter Boat	36	35	67	56	46	36	270
	Private/Rental Boat	126	70	347	377	250	126	1,290
	State Total	210	144	514	569	393	210	2.040
Florida (East)	Shore	574	670	677	713	655	624	3,913
, , ,	Charter Boat	157	143	126	110	124	92	752
	Private/Rental Boat	847	1,099	1,357	1,211	1,078	1,020	6,612
	State Total	1,578	1,912	2,160	2,034	1,857	1,736	11,27
Georgia	Shore	60	57	104	60	70	60	411
	Charter Boat	38	42	36	39	53	38	240
	Private/Rental Boat	121	99	198	207	124	121	870
	State Total	219	198	338	306	247	219	1.52
North Carolina	Shore	394	292	482	660	691	394	2,913
	Charter Boat	46	760	94	96	78	46	1,120
	Private/Rental Boat	228	378	565	539	508	228	2,440
	State Total	440	1,052	576	756	769	440	6,479
South Carolina	Shore	105	116	139	145	162	105	772
	Charter Boat	56	85	62	74	66	56	399
	Private/Rental Boat	174	152	285	319	303	174	1,407
	State Total	335	353	486	538	531	335	2,578
Alabama	Shore	66	59	92	85	80	62	444
	Charter Boat	32	39	53	43	38	54	259
	Private/Rental Boat	73	98	179	171	162	121	804
	State Total	171	196	324	299	280	237	1,50
Florida (West)	Shore	547	660	759	795	770	483	4,014
	Charter Boat	180	185	212	201	156	146	1,080
	Private/Rental Boat	1,137	1,525	1,704	1,465	1,424	1,163	8,418
	State Total	1,864	2,370	2,675	2,461	2,350	1,792	13,512
Louisiana	Shore	77	94	105	131	119	62	588
	Charter Boat	44	38	42	49	43	43	259
	Private/Rental Boat	329	344	555	577	665	390	2,860
	State Total	450	476	702	757	827	495	3,70
Mississippi	Shore	53	57	102	83	89	66	450
	Charter Boat	33	49	36	35	43	33	229
	Private/Rental Boat	72	115	171	169	212	110	849
	State Total	158	221	309	287	344	209	1,528
Hawaii	Shore	400	400	600	600	400	400	2,800
	Charter Boat	200	200	300	300	200	200	1,400
	Private/Rental Boat	400	400	600	600	400	400	2,800
	State Total	1,000	1,000	1,500	1,500	1,000	1,000	7,000
Grand Total		7.790	9.262	12 951	14 616	12 120	8.038	67.223

Table 2. (Continued)

Twice Current Sampling in the Northeast

	•			WA	VE			ANNUAL
State	Fishing Mode	1	2	3	4	5	6	TOTAL
Connecticut	Shore	74	84	102	198	136	74	668
	Party/Charter Boat	62	62	70	114	82	62	452
	Private/Rental Boat	98	92	314	486	234	98	1,322
	State Total	234	238	486	798	452	234	2.442
Maine	Shore	64	64	82	172	92	64	538
	Party/Charter Boat	64	64	64	96	96	64	448
	Private/Rental Boat	78	78	236	258	526	78	1,254
	State Total	206	206	382	526	714	206	2,240
Massachusetts	Shore	76	74	396	434	340	76	1,396
	Party/Charter Boat	70	96	122	196	140	70	694
	Private/Rental Boat	108	74	560	1,034	390	108	2,274
	State Total	254	244	1,078	1,664	870	254	4,364
New Hampshire	Shore	64	64	80	94	62	64	428
-	Party/Charter Boat	64	64	110	78	68	64	448
	Private/Rental Boat	40	40	114	136	80	40	450
State Total		168	168	304	308	210	168	1.326
Rhode Island	Shore	74	74	172	162	174	74	730
	Party/Charter Boat	68	66	80	84	76	68	442
	Private/Rental Boat	74	66	184	312	182	74	892
	State Total	216	206	436	558	432	216	2,064
Delaware	Shore	94	66	114	136	114	94	618
	Party/Charter Boat	66	66	90	102	68	66	458
	Private/Rental Boat	70	74	184	284	172	70	854
	State Total	230	206	388	522	354	230	1,930
Maryland	Shore	86	182	208	244	210	86	1,016
	Party/Charter Boat	76	72	118	200	138	76	680
	Private/Rental Boat	206	134	550	902	764	206	2,762
	State Total	368	388	876	1,346	1,112	368	4,458
New Jersey	Shore	222	138	270	414	340	222	1,606
	Party/Charter Boat	106	168	236	526	356	106	1,498
	Private/Rental Boat	284	268	870	1,488	1,016	284	4,210
	State Total	612	574	1,376	2,428	1,712	612	7,314
New York	Shore	84	118	232	414	280	84	1,212
	Party/Charter Boat	126	140	270	360	200	126	1,222
	Private/Rental Boat	232	192	906	1,294	708	232	3,564
	State Total	442	450	1.408	2.068	1.188	442	5.998

Table 2. (Continued)

Twice Current Sampling in the Northeast

	npling in the Northeast			WA	VE			ANNUAL
State	Fishing Mode	1	2	3	4	5	6	TOTAL
Virginia	Shore	96	78	200	272	194	96	936
9	Party/Charter Boat	72	70	134	112	92	72	552
	Private/Rental Boat	252	140	694	754	500	252	2,592
	State Total	420	288	1.028	1.138	786	420	4.080
Florida (East)	Shore	574	670	677	713	655	624	3,913
, ,	Charter Boat	157	143	126	110	124	92	752
	Private/Rental Boat	847	1,099	1,357	1,211	1,078	1,020	6,612
	State Total	1.578	1,912	2,160	2,034	1,857	1,736	11,277
Georgia	Shore	60	57	104	60	70	60	411
_	Charter Boat	38	42	36	39	53	38	246
	Private/Rental Boat	121	99	198	207	124	121	870
	State Total	219	198	338	306	247	219	1,527
North Carolina	Shore	394	292	482	660	691	394	2,913
	Charter Boat	46	760	94	96	78	46	1,120
	Private/Rental Boat	228	378	565	539	508	228	2,446
	State Total	440	1,052	576	756	769	440	6,479
South Carolina	Shore	105	116	139	145	162	105	772
	Charter Boat	56	85	62	74	66	56	399
	Private/Rental Boat	174	152	285	319	303	174	1,407
	State Total	335	353	486	538	531	335	2,578
Alabama	Shore	66	59	92	85	80	62	444
	Charter Boat	32	39	53	43	38	54	259
	Private/Rental Boat	73	98	179	171	162	121	804
	State Total	171	196	324	299	280	237	1,507
Florida (West)	Shore	547	660	759	795	770	483	4,014
	Charter Boat	180	185	212	201	156	146	1,080
	Private/Rental Boat	1,137	1,525	1,704	1,465	1,424	1,163	8,418
	State Total	1,864	2,370	2,675	2,461	2,350	1,792	13,512
Louisiana	Shore	77	94	105	131	119	62	588
	Charter Boat	44	38	42	49	43	43	259
	Private/Rental Boat	329	344	555	577	665	390	2,860
	State Total	450	476	702	757	827	495	3,707
Mississippi	Shore	53	57	102	83	89	66	450
	Charter Boat	33	49	36	35	43	33	229
	Private/Rental Boat	72	115	171	169	212	110	849
	State Total	158	221	309	287	344	209	1,528
Hawaii	Shore	400	400	600	600	400	400	2,800
	Charter Boat	200	200	300	300	200	200	1,400
	Private/Rental Boat	400	400	600	600	400	400	2,800
	State Total	1,000	1,000	1,500	1,500	1,000	1,000	7,000
Grand Total		7.790	9.262	12.951	14.616	12,120	8.038	85.331

Table 2 (Continued)

Thrice Current Northeast and Twice Current Southeast

				WA	VE			ANNUAL
State	Fishing Mode	1	2	3	4	5	6	TOTAL
Connecticut	Shore	111	126	153	297	204	111	1,00
	Party/Charter Boat	93	93	105	171	123	93	673
	Private/Rental Boat	147	138	471	729	351	147	1,983
	State Total	351	357	729	1,197	678	351	3,663
Maine	Shore	96	96	123	258	138	96	80′
	Party/Charter Boat	96	96	96	144	144	96	672
	Private/Rental Boat	117	117	354	387	789	117	1,88
	State Total	309	309	573	789	1,071	309	3,360
Massachusetts	Shore	114	111	594	651	510	114	2,094
	Party/Charter Boat	105	144	183	294	210	105	1,04
	Private/Rental Boat	162	111	840	1,551	585	162	3,41
	State Total	381	366	1,617	2,496	1,305	381	6,540
New Hampshire	Shore	96	96	120	141	93	96	642
	Party/Charter Boat	96	96	165	117	102	96	672
	Private/Rental Boat	60	60	171	204	120	60	67:
	State Total	252	252	456	462	315	252	1,989
Rhode Island	Shore	111	111	258	243	261	111	1,095
	Party/Charter Boat	102	99	120	126	114	102	663
	Private/Rental Boat	111	99	276	468	273	111	1,338
	State Total	324	309	654	837	648	324	3,090
Delaware	Shore	141	99	171	204	171	141	92
	Party/Charter Boat	99	99	135	153	102	99	68′
	Private/Rental Boat	105	111	276	426	258	105	1,28
	State Total	345	309	582	783	531	345	2,895
Maryland	Shore	129	273	312	366	315	129	1,524
	Party/Charter Boat	114	108	177	300	207	114	1,020
	Private/Rental Boat	309	201	825	1,353	1,146	309	4,143
	State Total	552	582	1,314	2,019	1,668	552	6,68
New Jersey	Shore	333	207	405	621	510	333	2,409
	Party/Charter Boat	159	252	354	789	534	159	2,24
	Private/Rental Boat	426	402	1,305	2,232	1,524	426	6,31:
	State Total	918	861	2,064	3,642	2,568	918	10,97
New York	Shore	126	177	348	621	420	126	1,81
	Party/Charter Boat	189	210	405	540	300	189	1,833
	Private/Rental Boat	348	288	1,359	1,941	1,062	348	5,34
	State Total	663	675	2.112	3.102	1.782	663	8.99

Table 2. (Continued)

Thrice Current Northeast and Twice Current Southeast

				WA	VE			ANNUAL
State	Fishing Mode	1	2	3	4	5	6	TOTAL
Virginia	Shore	144	117	300	408	291	144	1,40
	Party/Charter Boat	108	105	201	168	138	108	82
	Private/Rental Boat	378	210	1,041	1,131	750	378	3,88
	State Total	630	432	1,542	1,707	1,179	630	6,12
Florida (East)	Shore	1,148	1,340	1,354	1,426	1,310	1,248	7,82
	Charter Boat	314	286	252	220	248	184	1,50
	Private/Rental Boat	1,694	2,198	2,714	2,422	2,156	2,040	13,22
	State Total	3,156	3,824	4,320	4,068	3,714	3,472	22,55
Georgia	Shore	120	114	208	120	140	120	82
	Charter Boat	76	84	72	78	106	76	493
	Private/Rental Boat	242	198	396	414	248	242	1,74
	State Total	438	396	676	612	494	438	3,05
North Carolina	Shore	788	584	964	1,320	1,382	788	5,82
	Charter Boat	92	1,520	188	192	156	92	2,24
	Private/Rental Boat	456	756	1,130	1,078	1,016	456	4,89
	State Total	880	2,104	1,152	1,512	1,538	880	12,95
South Carolina	Shore	210	232	278	290	324	210	1,54
	Charter Boat	112	170	124	148	132	112	798
	Private/Rental Boat	348	304	570	638	606	348	2,81
	State Total	670	706	972	1,076	1,062	670	5,15
Alabama	Shore	132	118	184	170	160	124	88
	Charter Boat	64	78	106	86	76	108	513
	Private/Rental Boat	146	196	358	342	324	242	1,60
	State Total	342	392	648	598	560	474	3,01
Florida (West)	Shore	1,094	1,320	1,518	1,590	1,540	966	8,02
	Charter Boat	360	370	424	402	312	292	2,16
	Private/Rental Boat	2,274	3,050	3,408	2,930	2,848	2,326	16,83
	State Total	3,728	4,740	5,350	4,922	4,700	3,584	27,02
Louisiana	Shore	154	188	210	262	238	124	1,17
	Charter Boat	88	76	84	98	86	86	51
	Private/Rental Boat	658	688	1,110	1,154	1,330	780	5,72
	State Total	900	952	1,404	1,514	1,654	990	7,41
Mississippi	Shore	106	114	204	166	178	132	90
	Charter Boat	66	98	72	70	86	66	45
	Private/Rental Boat	144	230	342	338	424	220	1,69
	State Total	316	442	618	574	688	418	3,05
Hawaii	Shore	800	800	1,200	1200	800	800	5,60
	Charter Boat	400	400	600	600	400	400	2,80
	Private/Rental Boat	800	800	1,200	1200	800	800	5,60
	State Total	2,000	2,000	3,000	3,000	2,000	2,000	14,00
Grand Total		8.790	10.262	14.451	16,116	13.120	9.038	152,55

Table 3. Approximate Telephone Household Interview Quotas by State, Wave and Sampling Level

Current Sample Size

STATE			WA	VE			ANNUAL
	1	2	3	4	5	6	TOTAL
Southern California	2,117	2,329	4,981	5,617	4,320	3,253	22,617
Northern California	2,187	3,492	4,811	4,955	4,310	1,794	21,549
Oregon	1,411	1,315	2,647	2,090	4,046	929	12,438
Washington	1,411	1,315	2,469	6,878	3,682	641	16,396
Connecticut	321	344	816	1534	811	321	4,147
Maine	291	273	510	1005	488	291	2,858
Massachusetts	355	341	2377	3482	1909	355	8,819
New Hampshire	291	273	1105	1199	619	291	3,778
Rhode Island	291	273	846	1045	848	291	3,594
Delaware	348	262	659	938	600	348	3,155
Maryland	579	780	1691	2582	2108	579	8,319
New Jersey	1248	1032	2681	4797	3395	1248	14,401
New York	709	773	2671	4155	2369	709	11,386
Virginia	693	425	1943	2265	1506	693	7,525
East Florida	6265	7546	8310	8039	7335	6882	44,377
Georgia	671	603	1161	933	789	671	4,828
North Carolina	2834	2132	4510	5500	5534	2834	23,344
South Carolina	1156	1243	1711	1885	1909	1156	9,060
Alabama	549	601	1080	985	918	735	4,868
West Florida	7041	8883	10092	9561	9151	6633	51,361
Louisiana	1413	1542	2254	2491	2663	1505	11,868
Mississippi	473	670	1067	946	1134	664	4,954
Hawaii	388	388	585	896	409	529	3,195
GRAND TOTAL	33.042	36.835	60.977	73,778	60.853	33,352	298.837

Table 3. Approximate Telephone Household Interview Quotas by State, Wave and Sampling Level (Continued.)

Twice Current Sample Size in the Northeast

STATE			WAV	Έ			ANNUAL
	1	2	3	4	5	6	TOTAL
Southern California	2,117	2,329	4,981	5,617	4,320	3,253	22,617
Northern California	2,187	3,492	4,811	4,955	4,310	1,794	21,549
Oregon	1,411	1,315	2,647	2,090	4,046	929	12,438
Washington	1,411	1,315	2,469	6,878	3,682	641	16,396
Connecticut	642	688	1632	3068	1622	642	8,294
Maine	582	546	1020	2010	976	582	5,716
Massachusetts	710	682	4754	6964	3818	710	17,638
New Hampshire	582	546	2210	2398	1238	582	7,556
Rhode Island	582	546	1692	2090	1696	582	7,188
Delaware	696	524	1318	1876	1200	696	6,310
Maryland	1158	1560	3382	5164	4216	1158	16,638
New Jersey	2496	2064	5362	9594	6790	2496	28,802
New York	1418	1546	5342	8310	4738	1418	22,772
Virginia	1386	850	3886	4530	3012	1386	15,050
East Florida	6265	7546	8310	8039	7335	6882	44,377
Georgia	671	603	1161	933	789	671	4,828
North Carolina	2834	2132	4510	5500	5534	2834	23,344
South Carolina	1156	1243	1711	1885	1909	1156	9,060
Alabama	549	601	1080	985	918	735	4,868
West Florida	7041	8883	10092	9561	9151	6633	51,361
Louisiana	1413	1542	2254	2491	2663	1505	11,868
Mississippi	473	670	1067	946	1134	664	4,954
Hawaii	388	388	585	896	409	529	3,195
GRAND TOTAL	38.168	41.611	76,276	96.780	75,506	38.478	366.819

Table 3. Approximate Telephone Household Interview Quotas by State, Wave and Sampling Level (Continued.)

Thrice Current Sample Size in the Northeast and Twice Current Sample Size in the Southeast and the Pacific.

STATE			WAV	E			ANNUAL
	1	2	3	4	5	6	TOTAL
Southern California	4,234	4,658	9,962	11,234	8,640	6,506	45,234
Northern California	4,374	6,984	9,622	9,910	8,620	3,588	43,098
Oregon	2,822	2,630	5,294	4,180	8,092	1,858	24,876
Washington	2,822	2,630	4,938	13,756	7,364	1,282	32,792
Connecticut	963	1032	2448	4602	2433	963	12,441
Maine	873	819	1530	3015	1464	873	8,574
Massachusetts	1065	1023	7131	10446	5727	1065	26,457
New Hampshire	873	819	3315	3597	1857	873	11,334
Rhode Island	873	819	2538	3135	2544	873	10,782
Delaware	1044	786	1977	2814	1800	1044	9,465
Maryland	1737	2340	5073	7746	6324	1737	24,957
New Jersey	3744	3096	8043	14391	10185	3744	43,203
New York	2127	2319	8013	12465	7107	2127	34,158
Virginia	2079	1275	5829	6795	4518	2079	22,575
East Florida	12,530	15,092	16,620	16,078	14,670	13,764	88,754
Georgia	1,342	1,206	2,322	1,866	1,578	1,342	9,656
North Carolina	5,668	4,264	9,020	11,000	11,068	5,668	46,688
South Carolina	2,312	2,486	3,422	3,770	3,818	2,312	18,120
Alabama	1,098	1,202	2,160	1,970	1,836	1,470	9,736
West Florida	14,082	17,766	20,184	19,122	18,302	13,266	102,722
Louisiana	2,826	3,084	4,508	4,982	5,326	3,010	23,736
Mississippi	946	1,340	2,134	1,892	2,268	1,328	9,908
Hawaii	776	776	1170	1792	818	1058	6,390
GRAND TOTAL	71.210	78,446	137.253	170.558	136.359	71.830	665,656

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

Table 4. Approximate Telephone Household Interview Quotas By State, County and Wave at the Current Sample Size

STATE	COUNTY	SUBREG			WA	VE			ANNUAL
			1	2	3	4	5	6	TOTAL
6 California	37 Los Angeles	1	656	722	1,543	1,740	1,339	1,008	7,008
6 California	59 Orange	1	337	371	793	895	688	518	3,602
6 California	65 Riverside	1	221	243	519	586	450	339	2,358
6 California	71 San Bernardino	1	250	275	588	663	510	384	2,669
6 California	73 San Diego	1	346	381	814	918	706	532	3,696
6 California	83 Santa Barbara	1	135	149	318	358	275	207	1,442
6 California	111 Ventura	1	172	190	406	457	352	265	1,842
6 SOUTHERN CALI	FORNIA TOTAL		2,117	2,329	4,981	5,617	4,320	3,253	22,617
6 California	1 Alameda	2	214	342	471	485	422	176	2,110
6 California	13 Contra Costa	2	166	265	365	376	327	136	1,636
6 California	15 Del Norte	2	26	42	58	59	52	22	258
6 California	23 Humboldt	2	64	102	141	145	126	53	631
6 California	41 Marin	2	96	154	212	219	190	79	951
6 California	45 Mendocino	2	51	81	112	116	100	42	502
6 California	53 Monterey	2	103	164	226	233	203	84	1,014
6 California	55 Napa	2	62	100	137	141	123	51	615
6 California	67 Sacramento	2	191	305	420	433	377	157	1,883
6 California	69 San Benito	2	33	52	72	74	64	27	322
6 California	75 San Francisco	2	175	280	386	397	345	144	1,727
6 California	77 San Joaquin	2	120	192	265	273	237	99	1,186
6 California	79 San Luis Obispo	1	114	181	250	258	224	93	1,120
6 California	81 San Mateo	2	154	245	338	348	303	126	1,514
6 California	85 Santa Clara	2	221	352	485	500	435	181	2,174
6 California	87 Santa Cruz	2	91	145	200	206	179	74	894
6 California	95 Solano	2	100	160	221	227	198	82	988
6 California	97 Sonoma	2	117	187	258	265	231	96	1,154
6 California	105 Trinity	2	21	33	46	47	41	17	205
6 California	113 Yolo	2	67	108	148	153	133	55	665
6 NORTHERN CALI	FORNIA TOTAL		2,187	3,492	4,811	4,955	4,310	1,794	21,549
SOUTHWEST REC	GION TOTAL		4,304	5,821	9,792	10,572	8,630	5,047	44,166

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAVE				ANNUAL
			1	2	3	4	5	6	TOTAL
41 Oregon	3 Benton	3	61	57	114	90	175	40	538
41 Oregon	5 Clackamas	3	122	114	229	181	351	81	1,078
41 Oregon	7 Clatsop	3	43	40	81	64	123	28	379
41 Oregon	9 Columbia	3	45	42	84	67	129	30	396
41 Oregon	11 Coos	3	59	55	111	87	169	39	520
41 Oregon	15 Curry	3	33	31	62	49	95	22	292
41 Oregon	19 Douglas	3	72	67	136	107	207	48	637
41 Oregon	29 Jackson	3	91	85	170	135	261	60	801
41 Oregon	33 Josephine	3	65	61	122	96	187	43	574
41 Oregon	39 Lane	3	127	118	238	188	363	83	1,117
41 Oregon	41 Lincoln	3	48	45	90	71	138	32	423
41 Oregon	43 Linn	3	71	66	133	105	203	47	625
41 Oregon	47 Marion	3	111	104	209	165	319	73	981
41 Oregon	51 Multnomah	3	189	177	355	281	543	125	1,669
41 Oregon	53 Polk	3	52	48	97	76	148	34	455
41 Oregon	57 Tillamook	3	36	33	67	53	102	23	314
41 Oregon	67 Washington	3	130	121	244	193	373	86	1,146
41 Oregon	71 Yamhill	3	56	52	105	83	160	37	493
41 OREGON STATE TO	TAL		1,411	1,315	2,647	2,090	4,046	929	12,438
53 Washington	9 Clallam	3	62	58	108	301	161	28	717
53 Washington	27 Grays Harbor	3	64	60	112	312	167	29	744
53 Washington	29 Island	3	62	58	109	304	163	28	724
53 Washington	31 Jefferson	3	41	38	71	198	106	18	471
53 Washington	33 King	3	316	295	553	1,541	825	144	3,672
53 Washington	35 Kitsap	3	112	104	196	546	292	51	1,302
53 Washington	45 Mason	3	53	49	92	256	137	24	611
53 Washington	49 Pacific	3	37	34	64	178	95	17	425
53 Washington	53 Pierce	3	191	178	334	930	498	87	2,218
53 Washington	55 San Juan	3	29	27	50	139	75	13	332
53 Washington	57 Skagit	3	74	69	130	362	194	34	863
53 Washington	61 Snohomish	3	173	161	302	841	450	78	2,006
53 Washington	67 Thurston	3	106	99	185	515	276	48	1,229
53 Washington	73 Whatcom	3	93	87	163	454	243	42	1,082
53 WASHINGTON STAT	TE TOTAL		1,411	1,315	2,469	6,878	3,682	641	16,396
NORTHWEST REGIO	ON TOTAL		2,822	2,630	5,116	8,968	7,728	1,570	28,834
PACIFIC COAST TO	TAL		7,126	8,451	14,908	19,540	16,358	6,617	73,000

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAVE				ANNUAL
			1	2	3	4	5	6	TOTAL
9 Connecticut	1 Fairfield	4	62	66	156	294	155	62	795
9 Connecticut	3 Hartford	4	63	68	161	303	160	63	819
9 Connecticut	5 Litchfield	4	29	31	74	138	73	29	374
9 Connecticut	7 Middlesex	4	26	28	67	126	67	26	340
9 Connecticut	9 New Haven	4	62	66	156	294	155	62	795
9 Connecticut	11 New London	4	34	36	86	163	86	34	440
9 Connecticut	13 Tolland	4	24	25	60	113	60	24	306
9 Connecticut	15 Windham	4	22	23	55	103	54	22	278
9 CONNECTICUT STA	TE TOTAL		321	344	816	1,534	811	321	4,147
23 Maine	1 Androscoggin	4	31	29	54	105	51	31	300
23 Maine	5 Cumberland	4	48	45	83	164	80	48	467
23 Maine	9 Hancock	4	21	19	36	72	35	21	204
23 Maine	11 Kennebec	4	32	30	56	111	54	32	315
23 Maine	13 Knox	4	18	17	32	63	31	18	179
23 Maine	15 Lincoln	4	17	16	30	58	28	17	166
23 Maine	19 Penobscot	4	36	33	62	123	60	36	349
23 Maine	23 Sagadahoc	4	17	16	30	60	29	17	169
23 Maine	27 Waldo	4	17	16	29	58	28	17	164
23 Maine	29 Washington	4	17	16	30	60	29	17	169
23 Maine	31 York	4	38	36	67	132	64	38	376
23 MAINE STATE TOTA	L		291	273	510	1,005	488	291	2,858
25 Massachusetts	1 Barnstable	4	29	28	196	287	157	29	727
25 Massachusetts	5 Bristol	4	45	43	298	437	239	45	1,106
25 Massachusetts	7 Dukes	4	7	7	50	73	40	7	184
25 Massachusetts	9 Essex	4	52	50	347	508	278	52	1,286
25 Massachusetts	17 Middlesex	4	75	72	502	735	403	75	1,862
25 Massachusetts	19 Nantucket	4	5	5	35	52	28	5	131
25 Massachusetts	21 Norfolk	4	50	48	335	491	269	50	1,243
25 Massachusetts	23 Plymouth	4	40	39	269	394	216	40	997
25 Massachusetts	25 Suffolk	4	52	50	346	506	278	52	1,283
25 MASSACHUSETTS S	STATE TOTAL		355	341	2,377	3,482	1,909	355	8,819
33 New Hampshire	11 Hillsborough	4	97	91	370	401	207	97	1,265
33 New Hampshire	13 Merrimack	4	58	54	220	239	123	58	752
33 New Hampshire	15 Rockingham	4	82	77	313	340	175	82	1,070
33 New Hampshire	17 Strafford	4	53	50	202	219	113	53	691
33 NEW HAMPSHIRE S	TATE TOTAL		291	273	1,105	1,199	619	291	3,778

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAVI	E			ANNUAL
			1	2	3	4	5	6	TOTAL
44 Rhode Island	1 Bristol	4	31	29	91	112	91	31	386
44 Rhode Island	3 Kent	4	59	55	172	212	172	59	730
44 Rhode Island	5 Newport	4	43	40	124	153	124	43	526
44 Rhode Island	7 Providence	4	111	104	323	399	324	111	1,371
44 Rhode Island	9 Washington	4	47	44	137	169	137	47	580
44 RHODE ISLAND STA	ATE TOTAL		291	273	846	1,045	848	291	3,594
NORTH ATLANTIC S	SUBREGION TOTAL		1,549	1,504	5,654	8,265	4,675	1,549	23,196
10 Delaware	1 Kent	5	84	63	160	227	145	84	764
10 Delaware	3 New Castle	5	175	132	332	472	302	175	1,588
10 Delaware	5 Sussex	5	89	67	168	239	153	89	804
10 DELAWARE STATE 7	TOTAL		348	262	659	938	600	348	3,155
24 Maryland	3 Anne Arundel	5	50	68	147	224	183	50	721
24 Maryland	5 Baltimore	5	68	91	197	301	246	68	970
24 Maryland	9 Calvert	5	17	23	49	75	61	17	242
24 Maryland	11 Caroline	5	13	17	37	56	46	13	182
24 Maryland	15 Cecil	5	20	27	58	88	72	20	284
24 Maryland	17 Charles	5	23	32	68	104	85	23	336
24 Maryland	19 Dorchester	5	14	18	40	61	50	14	196
24 Maryland	25 Harford	5	33	44	95	145	118	33	468
24 Maryland	27 Howard	5	34	46	101	154	125	34	495
24 Maryland	29 Kent	5	10	14	30	46	38	10	149
24 Maryland	31 Montegomery	5	70	94	205	312	255	70	1,007
24 Maryland	33 Prince Georges	5	66	89	192	294	240	66	947
24 Maryland	35 Queen Annes	5	14	19	42	64	52	14	205
24 Maryland	37 St. Marys	5	20	27	59	91	74	20	292
24 Maryland	39 Somerset	5	11	15	32	50	40	11	160
24 Maryland	41 Talbot	5	14	19	42	64	52	14	207
24 Maryland	45 Wicomico	5	21	28	61	94	76	21	301
24 Maryland	47 Worcester	5	15	20	44	67	54	15	214
24 Maryland	510 Baltimore City	5	66	88	192	293	239	66	943
24 MARYLAND STATE	TOTAL		579	780	1,691	2,582	2,108	579	8,319
34 New Jersey	1 Atlantic	5	55	45	117	210	149	55	631
34 New Jersey	3 Bergen	5	105	87	227	405	287	105	1,217
34 New Jersey	5 Burlington	5	70	58	150	269	190	70	807
34 New Jersey	7 Camden	5	79	65	170	304	215	79	914
34 New Jersey	9 Cape May	5	37	30	79	141	100	37	423

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WA	VE			ANNUAL
			1	2	3	4	5	6	TOTAL
34 New Jersey	11 Cumberland	5	40	33	86	155	110	40	465
34 New Jersey	13 Essex	5	96	79	206	369	261	96	1,108
34 New Jersey	15 Gloucester	5	53	44	114	205	145	53	614
34 New Jersey	17 Hudson	5	82	68	177	316	224	82	950
34 New Jersey	21 Mercer	5	64	53	138	247	174	64	740
34 New Jersey	23 Middelsex	5	93	77	199	356	252	93	1,068
34 New Jersey	25 Monmouth	5	84	70	181	324	230	84	974
34 New Jersey	27 Morris	5	73	61	158	282	200	73	846
34 New Jersey	29 Ocean	5	78	65	168	301	213	78	902
34 New Jersey	31 Passaic	5	72	60	155	278	197	72	834
34 New Jersey	33 Salem	5	29	24	62	111	79	29	333
34 New Jersey	35 Somerset	5	57	47	122	219	155	57	658
34 New Jersey	39 Union	5	80	66	171	306	216	80	918
34 NEW JERSEY STA	TE TOTAL		1,248	1,032	2,681	4,797	3,395	1,248	14,401
36 New York	5 Bronx	5	74	80	277	431	246	74	, , , , , , , , , , , , , , , , , , ,
36 New York	47 Kings	5	105	114	394	612	349	105	1,678
36 New York	59 Nassau	5	80	88	303	472	269	80	1,293
36 New York	61 New York	5	99	108	374	582	332	99	1,594
36 New York	79 Putnam	5	21	22	78	121	69	21	331
36 New York	81 Queens	5	103	112	387	602	343	103	1,649
36 New York	85 Richmond	5	44	48	165	257	147	44	705
36 New York	87 Rockland	5	35	39	134	208	118	35	569
36 New York	103 Suffolk	5	80	87	300	467	266	80	1,279
36 New York	119 Westchester	5	69	75	259	403	230	69	1,105
36 NEW YORK STATE			709	773	2,671	4,155	2,369	709	11,386
51 Virginia	1 Accomack	5	14	8	39	45	30	14	150
51 Virginia	33 Caroline	5	10	6	27	31	21	10	104
51 Virginia	36 Charles City	5	6	3	16	18	12	6	61
51 Virginia	41 Chesterfield	5	35	22	99	115	76	35	382
51 Virginia	53 Dinwiddie	5	11	6	30	35	23	11	115
51 Virginia	57 Essex	5	7	4	19	22	15	7	74
51 Virginia	73 Gloucester	5	13	8	37	43	28	13	142
51 Virginia	85 Hanover	5	19	12	54	62	41	19	207
51 Virginia	87 Henrico	5	39	24	108	126	84	39	418
51 Virginia	93 Isle of Wright	5	12	7	33	38	26	12	128
51 Virginia	95 James City	5	14	9	40	46	31	14	154

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAVE				ANNUAL
			1	2	3	4	5	6	TOTAL
51 Virginia	97 King and Queen	5	6	3	16	18	12	6	61
51 Virginia	99 King George	5	8	5	23	27	18	8	90
51 Virginia	101 King William	5	7	5	21	24	16	7	81
51 Virginia	103 Lancaster	5	8	5	23	27	18	8	90
51 Virginia	115 Mathews	5	7	5	21	24	16	7	81
51 Virginia	119 Middlesex	5	7	4	20	24	16	7	78
51 Virginia	127 New Kent	5	8	5	21	25	16	8	82
51 Virginia	131 Northampton	5	9	5	24	28	19	9	93
51 Virginia	133 Northumberland	5	8	5	23	27	18	8	89
51 Virginia	149 Prince George	5	11	7	32	37	25	11	123
51 Virginia	153 Prince William	5	34	21	95	111	74	34	369
51 Virginia	159 Richmond	5	6	4	18	21	14	6	69
51 Virginia	175 Southampton	5	9	6	26	30	20	9	100
51 Virginia	177 Spotsylvania	5	18	11	49	57	38	18	190
51 Virginia	179 Stafford	5	18	11	50	58	39	18	193
51 Virginia	181 Surry	5	6	3	16	18	12	6	61
51 Virginia	183 Sussex	5	7	4	20	23	15	7	76
51 Virginia	193 Westmoreland	5	9	6	26	31	20	9	102
51 Virginia	199 York	5	15	9	43	51	34	15	168
51 Virginia	550 Chesapeake City	5	29	18	81	95	63	29	315
51 Virginia	570 Colonial Heights City	5	10	6	29	33	22	10	111
51 Virginia	630 Fredricksburg City	5	11	7	30	35	23	11	117
51 Virginia	650 Hampton City	5	28	17	78	91	61	28	304
51 Virginia	670 Hopewell City	5	12	7	33	38	26	12	128
51 Virginia	700 Newport News City	5	31	19	88	102	68	31	340
51 Virginia	710 Norfolk City	5	37	23	103	120	80	37	399
51 Virginia	730 Petersburg City	5	15	9	41	48	32	15	159
51 Virginia	735 Poquoson City	5	8	5	22	26	17	8	86
51 Virginia	740 Portsmouth City	5	24	15	68	80	53	24	265
51 Virginia	760 Richmond City	5	36	22	101	117	78	36	390
51 Virginia	800 Suffolk City	5	17	10	47	55	37	17	182
51 Virginia	810 Virginia Beach City	5	48	29	134	156	104	48	519
51 Virginia	830 Williamsburg City	5	7	5	21	24	16	7	81
51 VIRGINIA STATE	TOTAL		693	425	1,943	2,265	1,506	693	7,525
MID-ATLANTIC S	UBREGION TOTAL		3,577	3,272	9,645	14,737	9,978	3,577	44,786
NORTHEAST REG	GION TOTAL		5,126	4,776	15,299	23,002	14,653	5,126	67,982

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAVE				ANNUAL
			1	2	3	4	5	6	TOTAL
12 Florida	3 Baker	6	66	80	88	85	77	73	469
12 Florida	7 Bradford	6	74	89	98	95	87	81	524
12 Florida	9 Brevard	6	394	474	522	505	461	433	2,789
12 Florida	11 Broward	6	718	864	952	921	840	788	5,083
12 Florida	19 Clay	6	187	226	248	240	219	206	1,327
12 Florida	25 Dade	6	807	973	1,071	1,036	945	887	5,720
12 Florida	31 Duval	6	488	588	648	627	572	536	3,459
12 Florida	35 Flager	6	106	127	140	136	124	116	749
12 Florida	61 Indian River	6	191	229	253	244	223	209	1,349
12 Florida	69 Lake	6	240	289	319	308	281	264	1,701
12 Florida	85 Martin	6	203	245	270	261	238	223	1,441
12 Florida	89 Nassau	6	119	143	157	152	139	130	841
12 Florida	93 Okeechobee	6	91	110	121	117	107	100	645
12 Florida	95 Orange	6	488	588	647	626	571	536	3,457
12 Florida	97 Osceola	6	186	224	247	239	218	205	1,319
12 Florida	99 Palm Beach	6	600	723	796	770	703	659	4,250
12 Florida	107 Putnam	6	148	178	197	190	173	163	1,050
12 Florida	109 St. Johns	6	175	210	232	224	205	192	1,237
12 Florida	111 St. Lucie	6	231	278	306	296	270	254	1,636
12 Florida	117 Seminole	6	327	394	434	420	383	359	2,318
12 Florida	125 Union	6	45	55	60	58	53	50	322
12 Florida	127 Volusia	6	380	458	504	488	445	417	2,692
12 EAST FLORIDA	TOTAL		6,265	7,546	8,310	8,039	7,335	6,882	44,377
13 Georgia	1 Appling	6	0	0	51	41	34	0	126
13 Georgia	25 Brantley	6	37	33	43	34	29	37	214
13 Georgia	29 Bryan	6	42	37	49	39	32	42	241
13 Georgia	31 Bulloch	6	0	0	84	68	57	0	209
13 Georgia	39 Camden	6	57	51	67	53	45	57	329
13 Georgia	49 Charlton	6	31	28	35	28	24	31	177
13 Georgia	51 Chatham	6	174	156	200	159	135	174	998
13 Georgia	103 Effingham	6	56	50	63	51	44	55	319
13 Georgia	109 Evans	6	0	0	36	29	25	0	91
13 Georgia	127 Glynn	6	94	84	108	87	73	94	540
13 Georgia	179 Liberty	6	70	62	79	64	54	69	399
13 Georgia	183 Long	6	25	23	29	24	20	26	146
13 Georgia	191 Mcintosh	6	34	30	38	31	26	34	193

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAVI	E			ANNUAL
			1	2	3	4	5	6	TOTAL
13 Georgia	229 Pierce	6	0	0	46	38	31	0	115
13 Georgia	251 Screven	6	0	0	46	37	31	0	114
13 Georgia	267 Tattnall	6	0	0	49	40	33	0	122
13 Georgia	299 Ware	6	0	0	79	63	53	0	196
13 Georgia	305 Wayne	6	52	47	60	48	41	52	300
13 GEORGIA STATE T	OTAL		671	603	1,161	933	789	671	4,828
37 North Carolina	13 Beaufort	6	90	68	89	109	110	90	557
37 North Carolina	15 Bertie	6	59	44	58	70	71	59	362
37 North Carolina	17 Bladen	6	70	53	70	85	86	70	433
37 North Carolina	19 Brunswick	6	103	78	102	124	124	102	632
37 North Carolina	29 Camden	6	34	26	34	42	41	34	210
37 North Carolina	31 Carteret	6	106	79	105	128	129	105	652
37 North Carolina	41 Chowan	6	52	39	51	63	63	52	318
37 North Carolina	47 Columbus	6	93	70	92	112	113	93	574
37 North Carolina	49 Craven	6	122	92	121	147	148	122	752
37 North Carolina	51 Cumberland	6	0	0	214	261	263	0	737
37 North Carolina	53 Currituck	6	50	38	50	61	61	50	311
37 North Carolina	55 Dare	6	72	54	70	86	87	71	439
37 North Carolina	61 Duplin	6	84	63	84	102	102	84	519
37 North Carolina	63 Durham	6	0	0	199	242	243	0	685
37 North Carolina	65 Edgecombe	6	101	76	100	121	122	100	619
37 North Carolina	69 Franklin	6	0	0	80	98	99	0	277
37 North Carolina	73 Gates	6	40	30	39	48	48	40	246
37 North Carolina	77 Granville	6	0	0	80	98	99	0	277
37 North Carolina	79 Greene	6	50	38	50	61	61	50	311
37 North Carolina	83 Halifax	6	98	74	97	119	119	98	605
37 North Carolina	85 Harnett	6	0	0	111	136	136	0	383
37 North Carolina	91 Hertford	6	62	46	61	74	75	62	380
37 North Carolina	93 Hoke	6	0	0	56	69	70	0	195
37 North Carolina	95 Hyde	6	31	24	31	38	39	31	194
37 North Carolina	101 Johnston	6	0	0	126	154	154	0	434
37 North Carolina	103 Jones	6	40	30	40	48	49	40	249
37 North Carolina	107 Lenoir	6	104	78	104	126	127	104	644
37 North Carolina	117 Martin	6	68	51	67	82	82	68	418
37 North Carolina	125 Moore	6	0	0	110	134	135	0	379
37 North Carolina	127 Nash	6	0	0	121	147	148	0	416

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAV	VE			ANNUAL
			1	2	3	4	5	6	TOTAL
37 North Carolina	129 New Hanover	6	162	122	161	195	198	162	1,000
37 North Carolina	131 Northampton	6	59	44	59	72	72	60	367
37 North Carolina	133 Onslow	6	141	106	139	169	170	141	865
37 North Carolina	137 Pamlico	6	48	36	47	57	58	47	293
37 North Carolina	139 Pasquotank	6	78	59	76	94	94	78	478
37 North Carolina	141 Pender	6	75	57	74	91	92	75	464
37 North Carolina	143 Perquimans	6	45	34	44	55	55	45	279
37 North Carolina	147 Pitt	6	145	109	143	175	176	145	891
37 North Carolina	153 Richmond	6	0	0	91	111	112	0	314
37 North Carolina	155 Robeson	6	129	97	128	156	158	130	799
37 North Carolina	163 Sampson	6	93	70	92	112	113	93	574
37 North Carolina	165 Scotland	6	0	0	75	91	92	0	258
37 North Carolina	177 Tyrrell	6	26	20	26	31	33	27	163
37 North Carolina	181 Vance	6	0	0	83	102	101	0	285
37 North Carolina	183 Wake	6	0	0	304	370	372	0	1,046
37 North Carolina	185 Warren	6	0	0	54	66	66	0	187
37 North Carolina	187 Washington	6	49	37	49	60	60	49	304
37 North Carolina	191 Wayne	6	140	105	139	169	170	140	862
37 North Carolina	195 Wilson	6	114	86	113	138	139	114	705
37 NORTH CAROLINA	STATE TOTAL		2,834	2,132	4,510	5,500	5,534	2,834	23,344
45 South Carolina	5 Allendale	6	0	0	41	46	46	0	133
45 South Carolina	9 Bamberg	6	0	0	51	56	57	0	164
45 South Carolina	13 Beaufort	6	105	113	125	138	139	105	726
45 South Carolina	15 Berkeley	6	126	135	149	164	166	126	866
45 South Carolina	19 Charleston	6	202	217	239	263	266	202	1,389
45 South Carolina	27 Clarendon	6	0	0	65	71	72	0	208
45 South Carolina	29 Colleton	6	67	72	79	88	89	67	461
45 South Carolina	33 Dillon	6	0	0	68	75	76	0	220
45 South Carolina	35 Dorchester	6	103	111	122	136	137	103	713
45 South Carolina	41 Florence	6	121	130	144	158	160	122	835
45 South Carolina	43 Georgetown	6	76	81	90	99	100	76	521
45 South Carolina	49 Hampton	6	45	48	53	58	58	45	307
45 South Carolina	51 Horry	6	143	153	169	186	189	143	983
45 South Carolina	53 Jasper	6	42	45	49	54	54	42	284
45 South Carolina	67 Marion	6	64	69	76	83	85	64	439
45 South Carolina	75 Orangeburg	6	0	0	118	129	132	0	379
45 South Carolina	89 Williamsburg	6	63	68	75	82	83	63	432

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAVE	E			ANNUAL
			1	2	3	4	5	6	TOTAL
45 SOUTH CAROLIN	IA STATE TOTAL		1,156	1,243	1,711	1,885	1,909	1,156	9,060
SOUTH ATLANTI	C SUBREGION TOTAL		10,926	11,524	15,692	16,357	15,567	11,543	81,609
1 Alabama	3 Baldwin	7	187	204	250	227	212	250	1,331
1 Alabama	25 Clarke	7	0	0	118	109	101	0	327
1 Alabama	53 Escambia	7	0	0	144	131	123	0	397
1 Alabama	97 Mobile	7	362	397	485	442	412	485	2,582
1 Alabama	129 Washington	7	0	0	83	76	70	0	230
1 ALABAMA STATE	E TOTAL		549	601	1,080	985	918	735	4,868
12 Florida	1 Alachua	7	239	301	342	324	310	225	1,741
12 Florida	5 Bay	7	197	248	282	267	256	185	1,434
12 Florida	13 Calhoun	7	55	69	78	74	71	51	398
12 Florida	15 Charlotte	7	205	258	293	278	266	193	1,493
12 Florida	17 Citrus	7	183	231	263	249	238	173	1,337
12 Florida	21 Collier	7	220	278	316	299	286	208	1,608
12 Florida	23 Columbia	7	106	134	152	144	138	100	775
12 Florida	27 De Soto	7	78	98	111	106	101	73	567
12 Florida	29 Dixie	7	51	64	73	69	66	48	370
12 Florida	33 Escambia	7	280	353	401	380	363	263	2,040
12 Florida	37 Franklin	7	51	64	73	69	66	48	373
12 Florida	39 Gadsden	7	98	124	141	134	128	93	718
12 Florida	41 Gilchrist	7	48	61	69	66	63	46	353
12 Florida	43 Glades	7	43	54	62	59	56	41	315
12 Florida	45 Gulf	7	57	72	82	77	74	54	416
12 Florida	47 Hamilton	7	47	59	67	64	61	44	342
12 Florida	49 Hardee	7	67	85	96	91	87	63	489
12 Florida	51 Hendry	7	77	97	110	104	100	72	560
12 Florida	53 Hernando	7	188	237	270	256	245	177	1,373
12 Florida	55 Highlands	7	151	191	217	205	197	143	1,104
12 Florida	57 Hillsborough	7	511	644	732	694	664	481	3,726
12 Florida	59 Holmes	7	63	80	91	86	82	60	462
12 Florida	63 Jackson	7	101	128	145	137	131	95	737
12 Florida	65 Jefferson	7	52	66	75	71	68	49	383
12 Florida	67 Lafayette	7	35	44	51	48	46	33	257
12 Florida	71 Lee	7	341	430	489	463	443	321	2,488
12 Florida	73 Leon	7	245	309	351	332	318	230	1,784
12 Florida	75 Levy	7	86	108	123	117	112	81	626
12 Florida	77 Liberty	7	36	45	51	49	47	34	262
12 Florida	79 Madison	7	62	79	89	85	81	59	455

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAVE				ANNUAL
			1	2	3	4	5	6	TOTAL
12 Florida	81 Manatee	7	275	347	395	374	358	259	2,008
12 Florida	83 Marion	7	247	311	353	335	320	232	1,799
12 Florida	87 Monroe	7	158	199	226	214	205	149	1,150
12 Florida	91 Okaloosa	7	206	260	295	280	268	194	1,502
12 Florida	101 Pasco	7	318	401	455	431	413	299	2,317
12 Florida	103 Pinellas	7	562	709	806	763	731	530	4,101
12 Florida	105 Polk	7	350	442	502	476	455	330	2,555
12 Florida	113 Santa Rosa	7	155	196	223	211	202	146	1,133
12 Florida	115 Sarasota	7	327	413	469	444	425	308	2,386
12 Florida	119 Sumter	7	94	118	134	127	122	88	684
12 Florida	121 Suwannee	7	86	109	124	117	112	81	631
12 Florida	123 Taylor	7	70	88	100	95	91	66	509
12 Florida	129 Wakulla	7	60	76	86	82	78	57	438
12 Florida	131 Walton	7	91	114	130	123	118	85	661
12 Florida	133 Washington	7	69	87	99	94	90	65	503
12 WEST FLORIDA T	OTAL		7,041	8,883	10,092	9,561	9,151	6,633	51,361
22 Louisiana	1 Acadia	7	0	0	60	67	71	0	198
22 Louisiana	3 Allen	7	0	0	36	40	42	0	117
22 Louisiana	5 Ascension	7	52	58	62	68	73	56	370
22 Louisiana	7 Assumption	7	32	35	37	41	44	34	222
22 Louisiana	11 Beauregard	7	0	0	44	50	53	0	147
22 Louisiana	19 Calcasieu	7	95	104	111	122	131	101	665
22 Louisiana	23 Cameron	7	21	23	24	27	29	23	148
22 Louisiana	33 East Baton Rouge	7	0	0	169	187	200	0	557
22 Louisiana	37 East Feliciana	7	0	0	32	35	38	0	105
22 Louisiana	45 Iberia	7	58	64	68	75	80	62	406
22 Louisiana	47 Iberville	7	0	0	42	47	50	0	139
22 Louisiana	51 Jefferson	7	160	175	187	207	221	171	1,122
22 Louisiana	53 Jefferson Davis	7	38	42	45	50	53	41	269
22 Louisiana	55 Lafayette	7	96	104	112	123	132	102	671
22 Louisiana	57 Lafourche	7	65	71	76	84	90	70	455
22 Louisiana	63 Livingston	7	0	0	69	77	81	0	227
22 Louisiana	71 Orleans	7	166	181	193	213	227	176	1,156
22 Louisiana	75 Plaquemines	7	34	37	40	44	48	37	239
22 Louisiana	87 St. Bernard	7	61	66	71	78	83	65	424
22 Louisiana	89 St. Charles	7	46	50	54	59	63	49	321
22 Louisiana	91 St. Helena	7	0	0	24	26	27	0	77
22 Louisiana	93 St. James	7	30	33	35	39	41	32	209

PART I THE SCHEDULE SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

STATE	COUNTY	SUBREG			WAV	VE.			ANNUAL
			1	2	3	4	5	6	TOTAL
22 Louisiana	95 St. John the Baptist	7	43	46	50	55	58	45	297
22 Louisiana	97 St. Landry	7	0	0	72	80	86	0	238
22 Louisiana	99 St. Martin	7	45	49	52	58	61	48	313
22 Louisiana	101 St. Mary	7	52	57	61	68	72	55	366
22 Louisiana	103 St. Tammany	7	88	95	102	113	121	93	611
22 Louisiana	105 Tangipahoa	7	64	70	75	83	89	69	450
22 Louisiana	109 Terrebonne	7	68	75	80	88	95	73	479
22 Louisiana	113 Vermilion	7	51	56	59	66	70	54	357
22 Louisiana	117 Washington	7	46	50	54	59	64	49	322
22 Louisiana	121 West Baton Rouge	7	0	0	36	40	42	0	117
22 Louisiana	125 West Feliciana	7	0	0	22	24	26	0	72
22 LOUISIANA STAT	TE TOTAL		1,413	1,542	2,254	2,491	2,663	1,505	11,868
28 Mississippi	35 Forrest	7	0	0	159	141	169	0	469
28 Mississippi	39 George	7	44	63	75	67	80	62	390
28 Mississippi	41 Greene	7	0	0	41	37	43	0	121
28 Mississippi	45 Hancock	7	64	90	109	97	116	90	566
28 Mississippi	47 Harrison	7	143	202	244	216	259	201	1,264
28 Mississippi	59 Jackson	7	118	167	202	179	215	166	1,047
28 Mississippi	109 Pearl River	7	69	98	119	105	125	97	613
28 Mississippi	111 Perry	7	0	0	60	52	63	0	175
28 Mississippi	131 Stone	7	35	50	60	52	63	49	309
28 MISSISSIPPI STAT	TE TOTAL		473	670	1,067	946	1,134	664	4,954
GULF OF MEXICO	O SUBREGION TOTAL		9,476	11,696	14,493	13,983	13,866	9,537	73,051
SOUTHEAST REC	GION TOTAL		20,402	23,220	30,185	30,340	29,433	21,080	154,660
ATLANTIC AND	GULF COAST TOTAL		25,528	27,996	45,484	53,342	44,086	26,206	222,642
15 Hawaii	1 Hawaii	8	50	50	68	108	50	61	387
15 Hawaii	3 Honolulu	8	238	238	410	648	259	367	2,160
15 Hawaii	7 Kauai	8	50	50	50	50	50	50	300
15 Hawaii	9 Maui	8	50	50	57	90	50	51	348
15 HAWAII TOTAL			388	388	585	896	409	529	3,195
WEST PACIFIC TO	OTAL		388	388	585	896	409	529	3,195
GRAND TOTAL			33,042	36,835	60,977	73,778	60,853	33,352	298,837

^{*} For higher levels of sampling, simply multiply individual county allocations by 2 or 3, according to the sampling level description.